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PIKE AND PERCH

WITH NOTES ON RECORD PIKE AND A CHAPTER ON THE
BLACK BASS, MURRAY COD AND OTHER SPORTING
MEMBERS OF THE PERCH FAMILY

BY
ALFRED JARDINE

ILLUSTRATED



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THE PIKE.

CHAPTER I.

ESOX LUCIUS:

PICKEREL—JACK—GEDD—LUCE.

“The pike, or lucit, is a mercenary ;
Or anglers seem among themselves to vary ;
He loves no streams, but hugs the silent deeps,
And eats all hours, and yet no house he keeps.”

THEOPHILUS FRANCK, A.D. 1658.

THE Pike, or Jack, is a species of the Teleostean fishes classed as *Malacopterygii abdominales*, from the ventral fins being abdominal in position. Only one species of pike—*Esox lucius*—is found in the waters of Great Britain, or known in Europe, it being the typical representative of the *Esocidæ* family, in which the dorsal fin is set far back in the body and nearly opposite or perpendicular to the anal fin. Its other characteristics are: an elongated body nearly uniform in depth from head to commencement of back-fin, rounded back, sides compressed and covered with small scales ; length of head as one to four when compared with the extreme

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length of fish from nose to tail ; head flattened but long, the lower jaw longest, with extensive gape, with numerous small teeth round the front, and five or six large and very sharp teeth on each side ; upper jaw blunt and rather duck-billed in shape ; the vomer and palatine bones furnished with teeth of various sizes, a veritable phalanx of bristling "pikes" pointing inwards and downwards towards the throat ; these terrible weapons have hinged and movable bases of attachment, and are so arranged that while they favour the entry of the pike's prey, any attempt at escape is impossible, for they then fly up like so many harpoon blades, and hold it the firmer ; but no teeth are on the maxillary bones. The eyes are placed high and nearly on the top of the head, so that pike may be better able to see the prey swimming over them.

The tail is large and rather forked ; the pectoral and ventral fins are small ; there are mucous orifices in pairs on the head ; also some in single rows in the lower jaw-bones ; the cheeks and upper parts of gill-covers have scales on them. Pike are silvery white on the belly, but their other colourings vary according to location and season of the year. In spring and summer, while aquatic vegetation is green, they are mottled with white, yellow, and green ; in autumn and winter, olive brown mottled with green, thus assimilating to the surrounding conditions of decaying weeds and sedges—the head and back are dark olive brown ; tail, dorsal, and anal fin dark brown, mixed with red and dark green on the fin-rays ; the pectoral and ventral fins are pale brown, and the gills a vivid red.

There are known to be several species of pike in America, including the mascalonge (*Esox estor*) and the northern pickerel (*Esox lucioides*) both found in the great lakes; the common pickerel (*Esox reticulatus*) of the ponds and streams; the Long Island pickerel (*Esox fasciatus*), also the white and the black pickerel of the western waters; in a work recently published at New York,¹ Mr. A. N. Cheney gives a coloured plate of each, showing different marking and colouring; but he admits that colouring and marking are no sure guides in identification.

I confess that I have always held the belief that pickerel, pike, and mascalonge were simply small, large and larger specimens of one and the same kind of fish; but the following authoritative explanation, communicated by Mr. Cheney to the *Fishing Gazette* (July 3, 1897), proves that I was mistaken, and that, while in Europe we have but one species of pike, in America there are no less than five.

“The common names of our five members of the pike family are in order, beginning with the fish of largest growth: mascalonge, pike, pickerel, little pickerel, and banded pickerel, the two last named growing to about 12 in. in length. Following Dr. Jordan’s description, I will give the common and specific names, fin formulæ, scales, comparative measurements, &c., from his recent work, *Fishes of North and Middle America* (Jordan and Evermann). That all your readers may understand the signs used, I will explain that B. means branchiostegals; D., dorsal fin; A., anal fin. ‘Head 4’ or ‘depth 4’ mean that the length of the head in the one case, or the greatest depth of the body in the other, is contained four times in the length of the fish,

¹ *First Annual Report of the Commissioners of Fisheries, Game, and Forests, of the State of New York.*

measured from the tip of the snout to end of the last caudal vertebra, the caudal fin not being included. So in Eye 5 it means that the horizontal diameter of the eye is one-fifth of the length of the head. In Dr. Jordan's latest classification, the pikes constitute the family *Luciidae*. Your pike is *Esox lucius*, while ours, although the same fish, is by this classification *Lucius lucius*.

"MASCALONGE (*Lucius masquinongy*).—Head, $3\frac{2}{3}$; depth, 6; eye, 4 to 6 in snout; B., 17 to 19; D., 17; A., 15; scales, 150. These fish are hatched artificially by the State of New York, and this year a 60 lbs. fish was taken in the nets at Chantanque Lake, where the hatchery is situated. They reach a weight of 100 lbs.

"PIKE (*Lucius lucius*).—Head, $3\frac{1}{3}$; depth, 5; eye, $6\frac{1}{8}$ in head, $3\frac{1}{3}$ in snout; B., 14 to 16; D., 16 or 17; A., 13 or 14; scales, 123. They grow to a weight of 50 lbs.

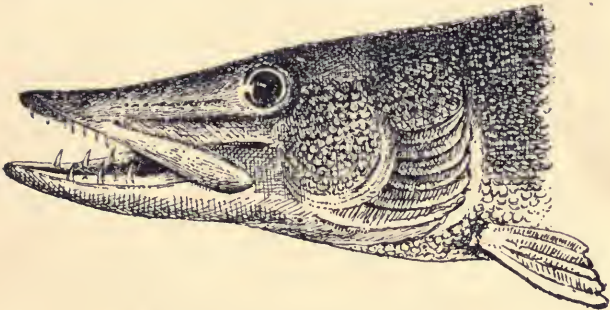
"PICKEREL (*Lucius reticulatus*).—Head, $3\frac{1}{2}$; depth, 6; eye, $3\frac{1}{2}$ in snout, 8 in head; B., 14 to 16; D., 14; A., 13; scales, 125. This fish is marked with numerous dark lines and streaks, which are constant, giving it a reticulated appearance; hence the name. It never has the bean-shaped lemon-coloured spots of the pike, and its maximum length is 24 in., and weight about 5 lbs. The average weight is from $1\frac{1}{2}$ lbs. to 2 lbs.

"LITTLE PICKEREL (*Lucius vermiculatus*).—Head, $3\frac{1}{4}$; depth, 5 to 6; eye, $2\frac{1}{2}$ in snout, 6 in head; B., 12; D., 11 to 12; A., 11; scales, 105. This fish has a dark bar from the eye downwards, and vermiculations on the sides. Grows to 12 in. in length.

"BANDED PICKEREL (*Lucius americanus*).—Head, $3\frac{3}{8}$; depth, $5\frac{1}{2}$; eye, 5; B., 12 or 13; D., 11 or 12; A., 11 or 12; scales 105. The sides of this fish are marked with about twenty distinct blackish curved bars, and has a black bar below the eye. I have omitted much of the colour description for the reason that it is not a sure guide to the identification of species, except in connection with the structural formation of the fish. I do not refer to the scale formulæ on cheeks and gill-cover, as I have already written about that, and given illustrations in the *Fisheries Commission Report*. The scale formulæ on cheeks and gill-covers, are constant, however, and will alone identify the mascalonge, pike, and pickerel, *Reticulatus*, when the little pickerel and

banded pickerel are absent ; but, as the two last named have the same scales as the *Reticulatus*, other means of identification must be employed ; but they are of such small size that they are not much regarded by anglers. The colouring of the pike is very constant ; but the mascalonge is variable, being spotted—dark spots on light ground in the St. Lawrence River basin, and unspotted in other waters.”

The marking and colouring of British pike differ somewhat according to season and the water they were captured in. The dorsal, caudal, and ventral fins vary, some being uniform in colour, while those



HEAD OF THIRTY-SIX POUND PIKE.

fin in other pike are marked with blotches of dark and light browns like tortoiseshell, the fin-rays being streaked with a dark shade of crimson. Mr. Cheney mentions the interesting fact that he hatches upwards of three million mascalonge annually. They are “hatched in boxes sunk in a lake, and provided with double bottoms and tops, so that the eggs are not eaten by other fish through the wire meshes. About 97 per cent. of impregnated eggs are hatched, and with the water at 55° Fahr., they hatch in about fifteen days, and it requires about

the same length of time to absorb the umbilical sac of the fry. The fry when first hatched are extremely helpless, and are a prey apparently to every other living thing in the water. The ovaries of a thirty-nine and a half pound mascalonge weighed five pound, and one female of thirty-five pound yielded 265,000 eggs, although all her eggs were not obtained."

The late Max V. J. Borne, the German fish-culturist, says the pike in Germany goes under different names, such as the speckled pike, dappled pike, and pike-king; that a spawner of four pound or six pound gives about 100,000 eggs; that fry hatch out in from one to three weeks, according to the temperature, and have a very large umbilical sac. The late Mr. Frank Buckland mentions a twenty-four pound pike caught in 1879 at Eastwell Park, Kent, that contained 224,640 eggs, also another of twenty-eight pounds caught in 1869 in Loch Awe, Scotland, that contained twenty-one ounces of roe, the number of eggs being 292,320.

Lambwaith (probably the present Lambeth) is the earliest place, and 1277 the year, where and when pike are first mentioned. Two years after they were found three successive times at the same place, and called "pickerel."

They were also taken at Cherwell, Gosford, and Oxford. With one exception (Cambridge, 1342) all other pike were taken from the lower portion of the river Cherwell; they are mentioned in the Act of the sixth year of Richard II., 1382, and also by Chaucer in the well-known lines—

"Full many a fat partrich hadde he in mewe,
And many a breme, and many a luce in stewe."

From which early dates, we may infer, I think, that pike are indigenous.

The pike is undoubtedly a fish of great antiquity, known to several Latin authors, who mention them as being caught of large size in the Tiber ; but it is questionable whether the *Esox* of Pliny was of the same kind as the British species.

The earliest date in which *Lucius* is mentioned in either poetry or prose was in the fourth century of the Christian era, when the poet Ausonius sang of him as—

“The wary Luce, ’midst wrack and rushes hid,
The scourge and terror of the scaly brood.”

Pike were highly esteemed on the table in this country during the fifteenth and sixteenth centuries, and frequent mention of them occurs in the bills of fare of that period. “Luce salt,” “pyke in harblet or herblade,” “in latmer sauce,” “in foyle,” “in sharpe sauce,” occur among the innumerable dishes served at the “intronizations” of the Archbishop of York in 1467, and of the Archbishop of Canterbury in 1504.¹

Pike are monogamous, and by February have paired, so that after this month, where one is caught the other may very often be captured ; the female spawns in March or early in April, depositing from 50,000 eggs—to 500,000 by a 32 lb. fish—on submerged rushes, sedges and sub-aqueous weeds, in shallow, quiet bays and ditches ; the eggs, which are small, hatch in from eighteen to twenty-one days. The growth rate of pike no doubt varies according to the conditions under which they live :

¹ Leland's *Collectanea* (edit. 1774), vol. vi.

in stews and lakes where there is plenty of food, such as young carp, roach, bream and other fish, they increase rapidly in weight and size. H. C. Pennell one of the best living authorities, says, "The rate of growth of pike has been by different authors variously estimated at from 1 to 5 lbs. a year; but these estimates do not generally appear to be based on any very reliable grounds, still less upon actual experiment," &c.; "and experience leads me to believe that the growth-rate is susceptible of very great variation, depending upon the nature of the water and the amount of food supplied to the fish; but that in the open waters—at least in England—it seldom averages more than 1 lb. a year during the first two years, and from $1\frac{1}{2}$ to 2 lbs. a year afterwards, decreasing again, after eight or nine years, to about the original ratio," &c. "On one point I have fully convinced myself, viz., that during the first year the maximum growth in open waters does not much exceed half a pound. The grounds of this conclusion are as follow:—Pike spawn in March or April; in June, when pike-fishing commences, I have not unfrequently taken, and seen taken, with the net, small jack of about an ounce, or a little more, in weight; in September, again, I have constantly taken them of three or four ounces with a minnow; and in January and February, specimens of from five to seven ounces; whilst I have never within my memory caught the smaller-sized fish at the later periods, or *vice versa*; thus pointing clearly to the inference that at these seasons there were young jack of those respective sizes, and none others—in other words, that the different sizes represented the different stages of growth. These I believe to

be the fish of about $\frac{3}{4}$ lb., of the following season,"¹ that is, "yearlings." Bloch, the eminent ichthyologist, says pike of three years' age are from 18 to 20 in. in length: and there are proofs on record that from this size they, if well supplied with food, will grow at the rate of 4 lbs. a year for six or seven successive years. "Piscator" (*Practical Angler*, p. 240) asserts the same, and gives as an instance a pond that held store-pike of 6 or 7 lbs., that was netted after an interval of seven years, when two pike were caught weighing 36 lbs. each. But, he says also, "from the result of my own observations in the different waters I have fished, I am inclined to think that an annual increase of about 2 lbs. is nearer the usual average; and in small, hungry waters I am certain the growth is much less." To quote Dr. Badham on "the growth of pike," he says that, "under favourable circumstances, during the earlier portion of life, the increase in weight is occasionally at the rate of 4 lbs. per annum; after twelve years it diminishes probably to 1 or 2 lbs., and lessens still more as age advances;" and, *vide* Hofland, "If well supplied with food and suitable water, pike will increase in weight from 3 to 4 lbs. annually."

A comparatively recent instance of rapid growth is mentioned by Frank Buckland in his *Natural History of British Fishes*, p. 154, viz., "In October, 1874, H.R.H. Prince Christian sent up Mr. Keene, the head fisherman of Windsor Park, with the most splendid pike I had ever beheld. Rapley Lake, Bagshot Park (a carp and tench preserve), had not been cleaned and the water run off for seventeen years, nor dragged for

¹ *The Sporting Fish of Great Britain.*

fifty years. Keene put in the nets, and brought out a number of carp, tench, &c. ; and he thought, from the jump of something in the net, that he had caught an unusually large fish. When the net shoaled, he was delighted to find a monster pike in it ; the fish darted between his legs and nearly upset him. This magnificent pike (I never saw one in more perfect condition) weighed 35 lbs. ; length, 3 ft. 10½ in. ; girth, 2 ft. The eyes were exceedingly beautiful ; the head shone like smoked mother-o'-pearl ; every scale was perfect, and fins as red as those of a perch. Mr. Keene asked me what I thought the age of the fish ; I guessed off-hand from twelve to fifteen years, and it appears I was not far wrong ; for, about twelve years before, Sir James Clarke's butler put six or eight jack, weighing about 1½ lb. each, into Rapley Lake." The pike (a female) contained over 43,000 eggs ; consequently—in October—was forward in spawn. From the above record, this fish appears to have increased from 1½ lb. to 35 lbs. in twelve years. No doubt it was the excellent quality and quantity of the carp in this pike's larder that enabled her to grow large and lusty in so short a time, for, of course, she would not touch the tench, *if* Izaak Walton was correct in asserting that 'the pike forbears to devour him (*i.e.* the tench) be he never so hungry ;' or the Rev. J. J. Manley was right, when he says, in *Notes on Fish and Fishing*, p. 252, 'We may take it as a fact, that the omnivorous pike refuses under all circumstances to take tench as food.'

He suggests that this may be because tench swim lowest in the water, and out of sight of the pike, which, their eyes being on the top of the

head, they cannot see and catch the tench. But, like carp, tench in hot weather delight to lie close to the surface of the water, basking in the sunshine. There exists, however, a fond ^{Tench} and ^{pike} superstition that accounts for the pike's leniency towards the tench on the ground that the latter is the pike's physician; and Camden, in his *Britannia*, asserts that he "has seen the bellies of pikes which have been rent open, have their gaping wounds presently closed by the touch of the tench, and by his glutinous slime perfectly healed up." Moses Brown writes in his *Piscatorial Eclogues* :—

"The pike—fell tyrant of the liquid plain,
Howsoe'er by raging famine pined,
The tench he spares—a medicinal kind;
For when, by wounds distress and sore disease,
He courts the salutary fish for ease,
Close to his scales the kind physician glides,
And sweats a healing balsam from his sides."

Whether, as a matter of taste, pike sometimes decline to lunch or dine off tench is, I think, an open question; I say *sometimes*, because, in or about the year 1881, when fishing at Kingsfleet, near Felixstowe, the late Mr. John Knechtli caught three pike, from 19 lbs. to 20 lbs. each, which were preserved and "set-up" by S. Sanders, who sent me the contents of the pikes' stomachs, which consisted of partly digested tench, the heads, tails and vertebræ of some showing they had been, when alive, fish from 2 lbs. to 3 lbs. weight.

That pike, when hungered, will gorge almost anything, is well known—rats, puppies, kittens, ^{Voracity} ducks, and fish of their own kind have ^{of pike} often been found inside them; and there are

instances of their having seized and swallowed the heads and necks of swans, and, being unable to disgorge them, both bird and fish were found choked and dead.

On one of my angling visits to Sonning-on-Thames, the landlord of the inn where I frequently stayed, told me a pike had taken up its quarters just above the bridge, and each morning, as his half-grown ducks swam across the river to feed in the opposite meadow, this pike had swallowed them one by one, until at last, out of a brood of fifteen, it had taken all but three. I was up and out next morning soon after daybreak, and as the surviving ducks swam over the river, there was a bulge in the water, one more duck disappeared, and I noticed where the pike made his home. The landlord came out of doors about seven o'clock; I told him what had happened, and that I would try to catch the pike. I pushed my punt up stream, a little above bridge, and spun the water over carefully with a small dace on my flight of hooks. The pike came at my lure at once, but missed it, making a swirl close to some sedges. I changed my tackle to paternoster, with a gudgeon for bait, worked it along by the sedges, hooked and landed the pike; then I caught four more, and went in to breakfast. The landlord doubted I had captured the fish. I rang for the puntsman; told him to bring in my captures; there were five pike, the smallest 6 lbs., the largest weighed 15 lbs., and, on opening it, we found the duck inside, with the feathers scarcely rumped.

Once, when fishing the Dorsetshire Frome, I caught a pike with half of a large eel hanging from its mouth, and, when the fish was opened and

cleaned, the other half of the eel, partly digested, was inside it; the eel would have exceeded 3 lbs. weight when alive, and yet this pike (of about 9 lbs.) took my roach-bait ravenously.

Bowlker, in his *Art of Angling*, p. 9, gives the following instance of the exceeding voracity of these fish:—"My father caught a pike in Barn Mere, Cheshire; it was an ell long, and weighed 35 lbs., which he brought to Lord Cholmondeley; his lordship ordered it to be turned into a canal in the garden, wherein were abundance of several sorts of fish. About twelve months after, the water was drawn off, and it was found that this overgrown pike had devoured all the fish except one large carp that weighed 9 or 10 lbs., that was bitten in several places. The pike was then put into the canal again, together with abundance of fish for it to feed upon, all of which it devoured in less than a year's time; and it was observed by the gardener and workmen there to take the ducks and other water-fowl; whereupon they shot magpies and crows, and threw them into the canal, which the pike took before their eyes. Of this they acquainted their lord, who thereupon ordered the slaughterman to fling in calves' bellies, chickens' guts, and such-like garbage to the pike to prey upon; and, being soon after neglected, it died, as supposed, for want of food."

The following was inserted in one of the London papers, January 2nd, 1765:—"Extract of a letter from Littleport, December 17th. About ten days ago a large pike was caught in the river Ouse, which weighed upwards of 28 lbs., and was sold to a gentleman in the neighbourhood for a guinea. As the cook-maid was gutting the fish, she found a

watch with a black ribbon, and two steel seals annexed, in the body of the pike. The gentleman's butler, upon opening the watch, found the maker's name, *Thomas Cranefield, Burnham, Norfolk*. Upon a strict enquiry it appears that the said watch was sold to a gentleman's servant, who was unfortunately drowned about six weeks ago, in his way to Cambridge, between this place and *South-Ferry*. The watch is in the possession of *Mr. John Roberts*, at the *Cross-Keys* in *Littleport*, for the inspection of the public."

Another characteristic of pike is their pugnacity, for where a large one has taken up its haunt and feeding-place in a river, it seldom, if ever, tolerates, —unless they have paired— a smaller pike as an interloper, and, as a rule, will attack and try to drive the smaller fish away. To give an instance of this: On February 2nd, 1879, when fishing in the late afternoon at Holme Bridge on the Frome, Dorsetshire, I caught a 15 lb. pike at the entrance to a favourite backwater; and, on landing the fish, found it was terribly scored and bitten on the back and sides, from which I concluded it had ventured into the cruising-ground of a much larger fish that had resented the intrusion, and which I decided to try for next morning. Commencing some distance up stream, and gradually fishing down, just outside the backwater in the main stream, my live-bait (a dace) was taken, and I struck a large and powerful fish. The river was flowing full, and the bridge was only a short distance below, through the small arches of which my punt would not safely pass, so that I had to play the fish heavily; but my gut-trace was of the best, and after twenty minutes' exciting sport, I gaffed my fish, a 23-pounder, in

splendid condition, and, no doubt, the one that had bitten my pike of the previous afternoon. As a matter of saving time, where 2 and 3 lb. jack keep taking the lure, it is wise to shift to another place. For experience has taught me that large and small ones do not consort together, and that where small jack abound, large pike are conspicuous by their absence. A well-known angler has said, "The pike is a systematic and professional marauder; he respects not his own kith and kin; he prowls up and down, seeking what he may devour; and he has no claim upon our consideration, except as a furnisher of sport." Nevertheless, the pike ranks high in the estimation of anglers as a game and sporting fish; for, when hooked on light spinning-tackle, paternoster, or snap, perhaps merely "lipped," and only feeling the restraint of the tether, he fights strongly and pluckily for liberty and life, and, being no mean antagonist, when he does escape, deserves his liberty.

CHAPTER II.

INCIDENTS, RECORDS, AND TRADITIONS OF PIKE-FISHING.

IT is an idiosyncrasy with some anglers to think (and perhaps believe) that a fish which ultimately escapes from the hook would have proved the largest of the day. They love to tell how, under very difficult circumstances, and notwithstanding very great skill on their part, their tackle has been broken and carried away by a monster fish.

On an occasion when I was fishing some grand pike water near Maidstone with a companion, he hooked a fish on spinning-tackle and lost it in a growth of sedges, into which the fish plunged and broke the trace; he declared it was a huge pike, "the biggest he ever had on his line." Next morning, near the same place, I caught a jack of 6 lbs. on paternoster, with my friend's spinning-flight in its mouth.

A peculiarity of other anglers is, that with their oft-repeated accounts of pike and other fish they have captured, or seen, the weight also of such specimens increases in a marvellous manner, irrespective of their length and girth.

A Lough Conn pike captured in September, 1894, was forwarded to a London fishing-tackle shop in Great Queen Street, W.C., to be set up in a glass case ; but before it was sent to the taxidermist, the shopkeeper lent the fish to a neighbouring angling society for exhibition at their weekly club meeting ; the members present, instead of *weighing* the fish, *guessed* it to be $37\frac{1}{2}$ lbs. ; the following Sunday it was reported in *The People* newspaper as $47\frac{1}{2}$ lbs. ; but its real weight was short of 30 lbs. In June, 1895, a pike of 28 lbs., netted in Lord Calthorpe's lake, Elvetham Park, Hampshire, was recorded in *The People* as 36 lbs., and was stated to have been "sent to a taxidermist for preservation" ; but the fish was buried, after being kept some days for his lordship to see.

These instances will suffice to show what fishy exaggerations are disseminated by some newspaper angling reporters and correspondents.

The following query and reply appeared a short while ago in the *Fishing Gazette* :—

"DEAR SIR,—Will you inform me in your next edition whether a pike would weigh less or more eighteen hours after being killed than it did when just taken out of the water, and what would be the increase or decrease in the weight of, say, an 11-lb. pike ?

"Yours truly,

"HENRY GREENWAY.

"TONBRIDGE, KENT."

"[A pike of 11 lbs. ought in theory to weigh about 15 lbs. eighteen hours after being caught ; it is a poor pike anyway which cannot do that. —ED. *Fishing Gazette*]."

"It seems to be the general opinion that fish have developed a most scandalous habit of losing weight after capture. Of course, if this is really so, somebody ought to talk to them very seriously about it, but my experience tells me that the notion is totally unfounded. A young friend of mine caught a pike the other day, and was so pleased with the monster that he had it set up by a very capable taxidermist. About ten minutes after the fish was landed he scaled 11 lbs. 9 oz. ; but, by the time he had matured, and was set up, his weight had so augmented as to be 15 lbs. 11 oz. This is nothing extraordinary ; every fish that has any respect for itself goes on in just the same fashion."—*Fishing Gazette*, May 15th, 1897.

Sir John Hawkins, in his fourth edition (1784) of *The Complete Angler*, at page 136, gives the following extract from a London paper of the 25th January, 1765 ; but it and similar accounts of monster pike may (I think) be relegated to the limbo of myths :—

"On Tuesday last at Lillishall Lime Works near Newport, a pool about nine yards deep that had not been fished for ages, was let off by means of a level brought up to drain the works, when an enormous pike was found ; he was drawn out by means of a rope fastened round his head and gills amidst hundreds of spectators, in which service a great many men were employed ; he weighed upwards of 170 lbs., and is thought to be the largest ever seen. Some time ago the clerk of the parish was trolling in the above pool, when his bait was seized by this furious creature, which by a sudden jerk pulled him in, and doubtless would have devoured him also, had he not by wonderful agility

and dexterous swimming escaped the dreadful jaws of this voracious animal."

"From the days of Gesner downwards," said Mr. Frank Buckland, "more lies have been told about the pike than any other fish in the world," and the Mannheim pike that attained a length of 19 feet and was captured in 1497 at the advanced age of 267 years, having in its gills a brass ring on which was engraved in Greek, 'I am the first fish that was placed in this pond (Kaiserwag Lake) by the hand of Frederick II., Governor of the World, on the 5th October, 1230,' may certainly claim to be the most fallacious fish on record." "Its skeleton and ring were long preserved in the cathedral of Mannheim," says Mr. Pennell in his *Book of the Pike*; "but upon subsequent examination by a clever anatomist it was discovered that the bones had been lengthened to fit the story—in other words, that several vertebræ had been added."

The Loch Ken pike of 72 lbs, mentioned by Daniel in his *Rural Sports*, appears to be of authentic weight. Its head, measuring 9 inches across the back of it, is said still to be preserved at Kenmure Castle, Galloway. There have always been great doubts as to the measurements and weight of Colonel Thornton's 48-lb. pike, and as to where and how it was caught. Hofland says, "The gallant colonel could 'draw the long bow'; and it was asserted on the other side of Tweed that the fish was taken on a trimmer!" There are suspicions also as to the genuineness of a 96-lb. pike said to have been captured in the early part of this century near Killaloe, Ireland; and of another 60-lb. pike, washed ashore dead in a storm on one of the Ballina lakes. Putting aside suchlike monsters, that seem

to be, in the words of Polonius, "very like a whale," most voracious historians agree that pike rarely exceed 40 lbs. in weight, at all events in these islands. Frank Buckland tells of a pike which was sent to him, caught with rod and line in one of the Norfolk Broads. It weighed 32 lbs. and measured 3 feet 8 inches in length; the roe weighed 5 lbs., and contained no less than 595,200 eggs.

On January 2nd, 1897, Lord Inverurie sought information through *The Fishing Gazette* relative to specimen pike of remarkable size caught within the British Isles, with the waters where they were captured, modes employed, names of the anglers, authentic weights, and other interesting details.¹ I had the pleasure of furnishing to that angling journal the following list of pike, whose weights had been vouched for, and were beyond dispute; there are but three Irish fish recorded, it being difficult to verify the reported weights of others caught in Irish waters.

1869, October, 28 lbs., caught in Loch Awe, by Mr. G. Rooper.

1870, April 2, 32 lbs., caught in Norfolk, captor not known.

1874, October, 35 lbs., netted in Rapley Lake, Bagshot Park (see *Buckland's Fishes*).

1875, January, 26½ lbs., caught with snap-tackle, in Thames, Hampton Deep, by Mr. Luton.

1876, January 2, 21 lbs., caught with snap, in river Frome, Dorset, by A. Jardine.

1876, July, 20 lbs., caught with gut perch-paternoster, in Thames, Marlow, by Mr. Wm. Ritchie.

¹ While these pages are going through the press comes the melancholy news of Lord Inverurie's death at the age of twenty years. He was a keen and skilful angler.—ED.

1877, January 5, $21\frac{1}{2}$ lbs., caught with snap, in Thames, Sonning, by A. Jardine.

1877, February 24, 36 lbs., caught with snap, at Maidstone, Kent, by A. Jardine.

1878, January 3, $20\frac{1}{2}$ lbs., caught with snap, in Thames, Sonning, by A. Jardine.

1878, January 30, $27\frac{1}{2}$ lbs., caught with paternoster, in Thames, Hampton Deep, by Mr. Barker.

1878, February, 29 lbs., caught with snap, near Norwich, by Mr. English.

1878, February 4, 22 lbs., caught with paternoster, in river Frome, Dorset, by A. Jardine.

1878, February 17, 22 lbs., caught with gorge tackle, at Bardney, river Witham.

1878, February 23, 30 lbs., caught with pike fly, in Lough Erne, Ireland, captor not known.

1878, February 24, 36 lbs., caught with snap, near Norwich, by Mr. F. Thorne.

1878, February 27, 23 lbs., caught with snap, near Petworth, Sussex, by A. Jardine.

1878, March 14, $22\frac{1}{2}$ lbs., caught with paternoster, near Chippenham, by A. Jardine.

1879, February 14, $21\frac{1}{2}$ lbs., caught with snap, near Petworth, Sussex, by A. Jardine.

1879, February, 24 lbs., caught in Eastwell Park, Kent, by H.R.H. the Duke of Edinburgh.

1879, February 28, $24\frac{1}{2}$ lbs., caught near Chippenham, by Mr. Pallison.

1879, September 4, 37 lbs., caught with snap, near Amersham, by A. Jardine.

1880, March 8, 22 lbs., caught with snap, near Petworth, Sussex, by A. Jardine.

1880, April 10, 27 lbs., caught at Halberton, by Mr. Frost.

1882, January 3, 23 lbs., caught with snap, in river Frome, Dorset, by A. Jardine.

1882, February 23, 30½ lbs., caught with paternoster, near Glynde, Sussex, by A. Jardine.

1883, July 2, 24 lbs., caught with worm while barbel fishing in Marlow Pool, Thames, by Mr. J. Bedford.

1883, November 27, 24¾ lbs., caught near Norwich, by Mr. English.

1884, January 19, 23 lbs., caught with paternoster, near Chippenham, by A. Jardine.

1884, January 19, 21 lbs., caught with snap, near Chippenham, by A. Jardine.

1884, January 19, 20½ lbs., caught with snap, near Chippenham, by A. Jardine.

1884, January 19, 19½ lbs., caught with snap, near Chippenham, by A. Jardine.

1884, January 19, 19 lbs., caught with snap, near Chippenham, by A. Jardine.

1887, February 15, 26 lbs., caught with snap, near Chippenham, by R. B. Marston.

1887, February 15, 23 lbs., caught with snap, near Chippenham, by Mr. S. W. Searle.

1887, February 15, 22 lbs., caught with paternoster, near Chippenham, by A. Jardine.

1888, November 25, 22 lbs., caught with snap-tackle, at Maidstone, Kent, by A. Jardine.

1888, November 25, 19½ lbs., caught with paternoster, at Maidstone, by A. Jardine.

1892, 33 lbs., caught in Lough Mask, Ireland, by Mr. W. F. Laurie.

1893, 37 lbs., caught in river Shannon, Ireland, and presented to Mr. R. B. Marston.

1894, January 16, 25 lbs., caught with live-dace snap-fishing, near Maidstone, by Mr. J. Sheather.

1896, February 19, 20 lbs., caught with worm on gut perch-paternoster, near Chippenham, by A. Jardine.

1896, February 19, 18 lbs., caught with snap, near Chippenham, by A. Jardine.

1896, November 22, 30 lbs., caught in Dagenham Lake, Essex, by Mr. Waller.

The following is an extract from a letter which appeared in the *Fishing Gazette* of January 30th, 1897:—"I opine that nowadays a pike of 20 lbs. may be considered a *big* fish, and that the capture of one that weight is the ideal which most fishermen set themselves, and hope to accomplish some day. Yours, &c.—F. N. S."

The foregoing list was supplemented by the following captures:—

1884, November 20, 21½ lbs., caught with spoon-bait in Sowley Pond, near Lymington, Hampshire, by Mr. C. Butler, junior.

1884, November 20, 28 lbs., caught with spoon-bait, in Sowley Pond, by Mr. H. Ritchie.

1888, November 14, 22 lbs., caught spinning a gudgeon in the Hayward Wide-water, near Stafford, by Mr. H. Evans.

1890, February 1, 20½ lbs., with snap-tackle in Hayward Wide-water, by Mr. B. Preece.

1891, December 17, 19½ lbs., with snap-tackle in Hayward Wide-water, by Mr. William Osborne.

1892, December 1, 22½ lbs., with snap-tackle in Hayward Wide-water, by Mr. William Osborne.

1893, November 13, 21½ lbs., with snap-tackle in Hayward Wide-water, by Mr. I. Evans.

1892, May 27, 26½ lbs., caught trailing with trout in Lough Arrow, co. Sligo, Ireland, by Mr. Rothwell. Note! pike spawn in April, therefore as this

pike was "out of season," the capture was unsportsmanlike.

1894, April, 32 lbs., caught trailing with "Blue Devon," in Lough Conn, co. Mayo, Ireland, by Mr. E. H. C. Smith, of Clifton College. Note! More flagrantly unsportsmanlike than the previous instance.

1895, December, 21 lbs., caught with livebait, in Barratt's Pool, Moire, Leicestershire.

1895, December, 25 lbs., caught with snap-tackle in the River Dove, near Tutbury, Staffordshire, by Mr. J. C. Wright.

When Whittlesea Mere was drained in the early part of this century in order to reclaim the land and place it under cultivation, as the waters receded a huge pike was left nearly "high and dry," and captured; it weighed 49 lbs.

Curious experiences sometimes happen to anglers when pike-fishing, in the shape of singular captures. As an instance of this, two friends were fishing in a lake at Amersham, Buckinghamshire, when one of them had his livebait taken, and almost immediately the other had a "run" from a good fish that took line rapidly off his reel; but the two lines seemed to draw together, and at last converged to one point, when it became evident both anglers had hooked the same fish. The pike was gaffed and landed; it had taken both baits and was hooked by both tackles. It was a handsome fish of 21 lbs. I saw it in the evening, when it was christened "The Union Jack." A similar incident occurred twice on the same day to myself and a companion when fishing the Dorset, Frome. One of the pike weighed 17 lbs., the other 9 lbs.

Inci-
dents
in pike
fishing

When fishing Loch Tay in 1870, Mr. Cramp saw two pike struggling and fastened together by the insertion of the head of one within the jaws of the other. Whether this was brought about by charging at one another when fighting or by both dashing at the same bait, and having got up steam, had too much way on them to avoid a collision, cannot be determined, but the head of the smaller fish was fixed up to its pectoral fins, in the mouth of the larger; and so they were gaffed through both their heads by Mr. Cramp's boatman, and sent thus (undivided in death) to Mr. Frank Buckland, who made a cast of them for his fish museum. The two fish weighed 19 lbs.

Unwary young pickerel have been known to be choked by attempting to swallow sticklebacks; and, if not completely choked in infancy, get wiser possibly after what Dr. Badham calls an attack of "sticklebackitis." At what size or weight does esox junior become a pike? Walton says at 2 ft.; Sir J. Hawkins at 3 lbs.; Salter at 3 lbs.; Hofland, 3 lbs., or when it exceeds 24 ins. in length; Piscator (*Practical Angler*) says 4 lbs.; "Ephemera," in his *Handbook on Angling*, 3 or 4 lbs.; Blaine, 4 or 5 lbs. Mr. C. Pennell favours a 3 lb. qualification, at which jack "might assume the dignities of pikehood."

Mr. Frank Buckland's opinion (as often expressed by him to me) was 5 lbs.; also that jack were infertile and incapable of reproducing their species ^{Age of} until they had attained the weight of at ^{pike} least 3 lbs.; and the fact that so many young fish under this weight, or say 24 ins. in length, are

caught and retained, also that where there was one angler twenty years ago, there are scores at the present time, fully accounts (I think) for the depletion of pike in English waters. It is a greater achievement to capture a 15 lb. pike now than it was to catch one of a score pounds previous to the "seventies." An Act should be passed making it illegal to retain jack under 3 lbs., then anglers would soon find these sporting fish increasing in our rivers and lakes. Having cast aside "jack-hood," to what age (irrespective of accident or capture) will a pike attain? This is a disputed point. Pennant refers to one ninety years old; Sir Francis Bacon says forty years is more likely to be the maximum; and Dr. Badham instances a pike in the College pond at Cambridge, that had "seen out many a generation of bed-makers and ten-year men." If Sir Francis Bacon was correct, a forty-year-old pike that had increased at the moderate estimate of $2\frac{3}{4}$ lbs. per annum, would at its death weigh a cwt. I have often wondered why the largest pike are females. In the early months of the year, when pike have paired, on catching a female, say of 20 lbs., and "going for" and capturing her mate, I have generally found him to be about a 12 lb. fish. Is it because males seldom attain to the splendid developments and proportions of "pikesses," or that the latter prefer to mate with young and active "husbands?" I never saw a really handsome male of heavy weight but once, and that was a grand specimen of 28 lbs., which came from Lord Normanton's fishery on the Hampshire Avon. My 37 lbs., 36 lbs., and $30\frac{1}{2}$ lbs. pike were all of the gentler sex.

A rare bit of sport is a good day's pike-fishing in private and preserved water, in some ancient park, where the undulating green-sward is clothed with ancestral oaks and elms. In such places it has been my good fortune to fish, and have grand sport.

Sport
in pre-
served
waters

I have in my mind's eye now, such a demesne, where, as described by Byron,—

“Before the mansion lay a lucid lake,
Broad as transparent, deep, and freshly fed
By a river, which its soften'd way did take
In currents through the calmer water spread
Around : the wild-fowl nestled in the brake
And sedges, brooding in their liquid bed ;
The woods sloped downwards to its brink, and stood
With their green faces fix'd upon the flood.”

It is not necessary to mention the exact locality, for if I did his lordship would have a score of letters by the next post, begging for a day's fishing ; suffice it to say, that fishing there January 19th, 1884, with a companion, we caught fifty-four pike, of which we kept twenty-two, and returned uninjured to the water all fish under 5 lbs. : my five largest pike weighed 23 lbs., 21 lbs., 20½ lbs., 19½ lbs., and 19 lbs. : my friend also had a fish of 18 lbs., 6 pike 121 lbs. And on subsequent visits there with Messrs. R. B. Marston and S. W. Searle, we captured pike weighing 26 lbs., 23 lbs., 22 lbs., 20 lbs. and 18 lbs. Some of the Sussex waters have furnished me with grand fish over 20 lbs. each ; notably a pike of 30½ lbs. killed on paternoster tackle, February 23rd, 1882 ; and Buckinghamshire has given me some big ones, including a very fine fish of 37 lbs. on September 4th, 1879. Nor does Kent, the county of my birth, stand much in

the rear, for it has accounted to me for pike over 20 lbs. each, and a monster of 36 lbs., February 4th, 1877, caught at Maidstone, relative to the capture of which the late Frank Buckland gives the following particulars in *The Natural History of British Fishes*, page 156:—"On arriving at the water, which for some days previously had been thick from rains, Mr. J—— found the fish feeding; and snapfishing with a large dace, Mr. J—— fancied he had hooked only a small pike, as it came along towards him without much pulling; when however the fish was struck smartly, she began to show fight, tried to make a bolt of it, and then rushed violently through the water with open mouth towards J——, the tightened line still in her jaws. Coming along the side of the boat she grinned a ghastly grin, and two pairs of eyes met—the man's and the fish's—in dire defiance of each other. The pike then shook her head smartly, after the manner of a dog worrying a rat; all in vain, the hooks were too firmly fastened in her tongue, and they could not be shaken out. Off went the pike again round the pool, and then came a deal of manœuvring on the part of the fisherman. The skiff—not a flat-bottomed boat—was anchored in deep water by a rope and chain, and the angler's fear was that the fish would manage to twist the line round the rope, in which case the line would, in all probability, give way. He therefore tried all he could to get up the anchor. Kneeling on one knee, he pulled hard at the anchor-rope, while he played the pike with the other hand; but no, the anchor would not come up, so he devoted his entire attention to the fish. After dancing a *pas de deux* with his partner for a long time, the fish began to give way, and to roll herself

languidly about ; J—— brought her near the side of the boat, but several times did she again plunge into the depths below, making great swirls with her tail ;

‘ Illam ter fluctus ibidem

Torquet agens circum, et rapidus vorat æquore vortex.’

“ Still the difficulty remained how to get the fish into the boat. Piscator was ready for the emergency. Slipping the gaff gently into the water, with a swift jerk he chucked the fish under her chin, and having felt the hold was firm, he dropped his rod, and put the finger and thumb of his other hand into the pike’s eyes. Another moment and the pike was in the skiff. Then came the tug-of-war between man and fish. The pike, feeling for the first time herself out of water, began to lash about most furiously. J—— stopped this little game with a blow on her head, that had only a slight effect in felling the fish, which was determined to do as much mischief as she could. Lashing her tail about like a crocodile, she first upset the large bait-can containing the livebaits, so that there was a merry morris-dance in the boat, the big fish surrounded by the little ones. She then made a charge upon J——’s commissariat ; smash went the bottle of sherry, then a tumbler, then the sandwiches and a tobacco-box.

“ Affairs were becoming very serious, for the pike had rolled herself up with the loose line and some spinning-flights she had upset out of the tackle-case. J—— then tried to get her head into a sack. No sooner was her head in than it popped out again, the fish seeming to be aware that if Mr. J—— ‘gave her the sack’ it was all up with her,

as is the case with the Sultan's wives, who, when disobedient, are put into a sack and tumbled into the Bosphorus. This, I believe, is the origin of the term 'giving the sack.' At last J—— managed to get towards shore, when the keeper at last—gone to his dinner of course!—came to his assistance, when the two of them contrived to bag the pike effectually, and they carried her a long way inshore before J—— gave her the final *coup de grâce*." This pike measured $45\frac{1}{2}$ ins. in length, and $25\frac{1}{2}$ ins. in girth. Two casts were made of it by Frank Buckland, one for his Fish Museum, South Kensington, the other cast was painted to life by H. L. Rolfe, and is in the possession of its captor.

There is no doubt that river-pike are, size for size, more powerful and give better sport than lake-fish; for living much of their time and pursuing their prey in quick flowing streams, and often in the rapid rush of weir-pools, they get to be like athletes in training, and when hooked fight for freedom while there is any "fight" left in them. The dash of even a ten-pound river-pike, on either spinning, snap, or paternoster tackle, is something to make one's blood tingle in cold weather when those fish are at their best; and the sport is not so much inferior to that given by a salmon of similar size, which anglers for those fish assert should be played and landed at the rate of a minute per pound weight. The Thames has given me many very fine pike, my best two days being at Sonning, in January, 1877, with a friend, twenty-three fish weighing 190 lbs., the largest $21\frac{1}{2}$ lbs., $18\frac{1}{2}$ lbs., 17 lbs., and 15 lbs.

On the Dorsetshire Frome in January 1882,

a companion and myself had forty pike, the largest ten weighing, two days after capture, at the Gresham Angling Society, London, 135 lbs. 5 ozs., of which the three heaviest weighed together 59½ lbs. This capture represented two days' fishing, which "Red Spinner" (Wm. Senior) referred to as having "no parallel in angling history so far as London clubs were concerned, because the fish shown were only the largest; and the anglers took thirty more, from 3 lbs. to 7 lbs." However, it was excelled in 1884, when on January 19th I broke my own record, and caught five pike weighing together 103 lbs.

Pike are nutritious food, and contain more nitrogenous or muscle-forming qualities than meat, as was shown by the "Analysis Pike as food Tables of the Food Collection" at the Bethnal Green Museum; and as an adjunct to the domestic bill of fare, a small pike of from 5 to 8 lbs. weight, caught during November or the next three months, when fat and nicely cooked, is a dish by no means to be despised. There are various ways of making these fish very pleasant to the taste, for which some excellent recipes are given on pages 37 and 38.

The pike, in spite of his many vices, is indeed worthy of more attention than he usually obtains; he is a most toothsome food when he has been properly subjected to the culinary art. His merit was so acknowledged in early times by King Edward I., who saw no reason why his subjects should be left to the mercy of a fish "ring." Regulating the prices of the different sorts of fish then brought to market, he fixed the value of pike higher than that of fresh salmon. But those patriarchal

times have changed; for fresh-water fish, except at the Jews' feasts and holidays, there is scarcely a market at all—always excepting trout; and the poorer populations have now to devour, at comparatively high prices, the offal fish of Billingsgate, and the refuse sweeping out of other great fish markets, *i.e.*, the fish that are too much off colour to be sold otherwise, and which account for the atmosphere of Leather Lane and suchlike fragrant thoroughfares. Our inland lakes, ponds, and broads are lying useless, and pike would well repay cultivation in them, for they grow and fatten with great rapidity. I do not speak of rivers, for the cultivation of pike (and eels) in rivers would raise an outcry amongst trout anglers, as trout have but little chance against the strength and voracity of this water wolf.

It has been asserted by many good authorities that an acre of water will grow as much food as three acres of land. In any given area of water or land where under natural conditions can be obtained nourishment, there is found living (taking one year with another) fully as much life as can support and reproduce itself; and on this basis of fact, pike could be grown and cultivated with success, as carp are in Germany, where they are so much valued as food.

In one carp-pond of a fish-farm, 30,000 young carp have been observed constantly to yield at the end of three years, 20,000 kilogrammes, *i.e.*, 50,000 lbs. of marketable fish. It is necessary to keep a few pike in the same pond, which prey upon the carp to a certain extent; the carp-culturists know how many pike to introduce; a few act beneficially in destroying the smaller and more

sickly individuals of the carp stock, who would either not survive for the three years, or would show no growth proportionate to their consumption of food. On the other hand too large a number of pike would reduce the total weight of carp, which would thus have been converted into pike-flesh, instead of remaining as carp. It has often puzzled naturalists how newly-made lakes and ponds, or streams known to have never contained pike, should suddenly have been stocked with them. Some naturalists, including the late Frank Buckland, considered it was by water-fowl—such as ducks, coots, moorhens, or dabchicks, which, feeding among aqueous weeds where vivified spawn had been deposited, on taking flight to other waters conveyed some of the spawn, which is glutinous, sticking between their feathers or to their feet; or, may be, it passed from them in an undigested state, and by either of these means it was disseminated. The rivers Darent and Wandle when I was a lad contained no jack or pike; now they are infested with them; and the trout-fishing has suffered in consequence. The *Saturday Review* of November 7th, 1888, in an article on “Water Wolves,” stated that pike certainly have a curious instinct which sometimes causes them to embark on land-journeys in search of food and water, if deprived of either of these necessities to their existence.¹ Mr. Newnham, an English resident at Antwerp, in order to test this theory of migration, made two new ponds, and stocked one with pike and the other with small fresh-water fish, such as dace, roach, &c. After two days he had both ponds emptied, when it was

¹ I hope I may not be understood to endorse this statement.—ED.

discovered that many of the pike had travelled by some means or other from their own pond into that of their neighbours, and had devoured the greater part of them.

That these pike should have taken less than two days to think out their marauding plan and put it in practice is a proof that *Esox lucius* is at least possessed of a prompt and decided character, and there can be little doubt that the pike is an exception to the rule, that fish have little or no intelligence. Even the size of his brain is worthy of respect. Its proportionate size as compared to the rest of the body, is as 1 to 1,300; in the shark, whose intelligence has so often been vaunted, it is only as 1 to 2,500, while in the tunny it is but as 1 to 3,700.

When the late Dr. Warwick resided at Dunham, the seat of the Earl of Stamford and Warrington, he was walking in the park by a pond where fish were temporarily kept for the table; and a pike of about 6 lbs. weight, when it observed him darted hastily

A very
strange
story away, and in doing so struck its head against a tenter-hook in a post, one of several placed in the pond to prevent poaching; and, as it afterwards appeared, fractured its skull and turned the optic nerve on one side. The anguish suffered by the fish appeared, to be intense; it rushed to the bottom, boring its head into the mud, writhing about, and for a short interval was almost lost to sight; then plunging about the pond, at length threw itself out of the water on to the bank. The doctor on examining it found a small portion of brain was protruding from the fracture in the skull. He carefully replaced this, raised the indented portion of the skull, and replaced the

pike in the pond. It appeared at first a good deal relieved, but in a few minutes again plunged about and threw itself a second time out of the water. Dr. Warwick again did what he could to relieve it, and put it back into the water. But as the fish several times continued to throw itself out, he with the assistance of the keeper made a kind of bandage or pad for the fish, which was then left in the pond to its fate. Upon the doctor making his appearance there the next morning, the pike swam to the edge of the water, the doctor examined the fish's skull and found it going on all right. He then walked backwards and forwards along the edge of the pond for some time, and the fish continued to swim up and down, turning whenever he turned ; but being blind on the wounded side of the skull, appeared to be agitated when it had that side towards the bank, as it could not then see its benefactor. The next day the doctor took some friends down to see the fish, which came to him as before, and at length he actually taught the pike to come to him at his whistle and feed out of his hands. Dr. Warwick thought this a remarkable instance of gratitude in a fish for a benefit received ; and as it always came to his whistle, it also proved, what he had previously disbelieved, that fishes are sensible to sound. This incident as related is vouched for in Cassell's *World of Wonders*, from which it would appear that gratitude is a trait in the character of pike. In the "Badminton Library" (*Coarse Fish*) at page 275, it is stated that "at Sir J. Bowyer's, near Uxbridge, there is, or was, a pond full of tame pike which could be called together at pleasure."

From a gastronomic point of view pike from those rivers that contain trout and salmon (the

young of which they feed upon) are much the finest in flavour: Stoddart says, "as for the 'Teviot pike,' I consider them at all times preferable to the general run of salmon captured in that stream." In the Dorsetshire Frome, pike consume salmon-smolts, and are delicious eating. I once caught in that river a 19 lb. pike with a 3 lb. grilse inside, so recently swallowed that its scales were intact and brilliant—digestion not having commenced; this pike and another about the same size a friend had "kippered" for me after the manner of Scotch salmon, and they were almost as good eating when cut into thin slices, and broiled as a relish for breakfast. Thames pike are excellent, and the smelt-fatted pike of the Medway are considered among the best in this country. But cooking has a great deal to do with the gastronomic qualities of pike; and it is well that those intended for the table should be gutted, cleaned, and crimped as soon as possible after being caught. For crimping, a fish exceeding 5 or 6 lbs. is best; and it is done by stunning or killing the pike by a blow or blows on the top of its head just behind the eyes, and making several transverse cuts, an inch or two apart, nearly as deep as the backbone; cut the gills under the throat, and hold the fish in a cool spring or the running stream until the bleeding ceases. Sir Humphry Davy says that "crimping preserves the flesh hard and crisp," and that "a fresh fish not crimped is tough." Stoddart and other authorities consider a pike is very much better eating when crimped, and especially so if for boiling.

The best way to cut up a pike is to take off the head, cut down the back from shoulder to

tail along one side of the backbone, when it and the ribs can be easily removed, and the flesh left intact: if the vertebra is not removed, rub salt into it and hang the fish in the air for some hours, *i.e.*, to "wind-dry" it, before cooking. After being thus treated, simply boil it with a little salt in the water, serve with plain melted butter or oyster sauce; or baked whole, with ordinary veal stuffing inside it, and well baked, makes an excellent dish. Roasting with strips of bacon tied round, and basting it until it acquires a fine brown colour, is another satisfactory and easy way to cook a 4 or 5 lb. fish. If a pike is boiled and allowed to get cold, it can be taken from the bones in flakes, which when fried in fresh butter or olive oil, with pepper and salt added, and dredged with flour, will be found toothsome. Or place the flakes in a deep dish with the liquor from the fish (which cold is like stiff jelly), a few pieces of butter, and a dessert-spoonful of anchovy sauce, a teaspoonful of soy, or Worcestershire sauce, a squeeze of lemon, a little pepper and salt and some chopped parsley; then cover with pastry-crust, or mashed potatoes, and bake until browned; a few oysters added improves it.

A pike (of 4 or 5 lbs.) cut across in fillets an inch thick or in longitudinal slices, and the bones withdrawn, dredged in flour and fried in *boiling* oil or butter, *thoroughly browned*, and served hot, is very palatable; yet another method is to split a small jack lengthways, remove the head, fins, and bones, and simmer it slowly in a dish with butter and a bunch of savoury herbs.

The late Mrs. Beeton, in her *Dictionary of Cookery*,

How to
cook
pike

1872, gives the following :—"Pike (*à la* Genevese). Divide a 4 or 5 lb. pike into slices or cutlets one-and-a-half-inch thick ; two chopped shalots, a little parsley, a small bunch of herbs, two bay leaves, two carrots, pounded mace, pepper and salt to taste, four tablespoonfuls of madeira or sherry, half-a-pint of white stock, thickening of flour and butter, one teaspoonful of essence of anchovies, the juice of one lemon, cayenne and salt to taste :—Mode—Rub the bottom of a stewpan over with butter, and put in the shalots, herbs, bay leaves, carrots, mace, and seasoning ; stir them for ten minutes over a clear fire, and add the madeira or sherry ; simmer gently half an hour, and strain through a sieve over the fish, which stew in this gravy. As soon as the fish is sufficiently cooked take away all the liquor, except a little to keep the pike moist, and put it into another stewpan ; add the stock, thicken with butter and flour, and put in the anchovy, lemon-juice, cayenne and salt ; lay the pike on a hot dish, pour over it part of the sauce, and serve the remainder in a tureen. Time, $1\frac{1}{4}$ hour. Cost, averaging 3s. Sufficient for six or eight persons."

Mrs. Glasse, in her often-quoted formula for cooking a hare, says, "first catch your hare."

To anglers who wish to become acquainted with *Esox lucius* gastronomically, also from the desire for sport, we give this advice, "capture your pike" ; and in order to enable them to do so, the next section of this volume will be devoted to a description of the tackles used and the methods employed when angling for those fish.

CHAPTER III.

PIKE RODS, REELS, AND TACKLES.

“If I, that am an angler, may protest,
Fishing is sweet pleasure, of sport the best,
Of exercises the most excellent,
Of recreation the most innocent ;
But now the sport is marred ; and wot ye why ?
Fishes decrease,—for fishers multiply.”
“Epigram,” *De Piscatione*, A.D. 1598.

THE angler intent on the capture of pike should equip himself with a perfect rod, reel, and line, and the necessary tackle, baits, &c. There are various ideas among pike-fishermen as to what is a *perfect* rod. Some give the preference to bamboo, others to rods made of hickory or lancewood ; the two latter are tough and substantial materials, but, to my way of thinking, are too heavy, and likely to tire the angler who has a day's fishing before him, and a long trudge perhaps of many miles beside a river.

From a combination of woods may be constructed a very serviceable rod ; for instance, with ash for the butt, hickory the second and third joints, and spliced hickory and lancewood, or, better still, hickory and solid cane spliced for the

top joint. Some give the choice to a rod entirely of greenheart, which is springy, but a wood that is very treacherous and liable to fracture unless the joints are *rent* from the plank, thereby ensuring straight fibres; if this is done no rod can be better, but it is expensive. If, however, instead of rending the joints they are *sawn* from the plank, which is a common practice in the manufacture of medium-price rods, the joints are very likely to snap under the strain of playing a fish, or even—as I have more than once seen—when an angler has been making a cast with a rather heavy bait.

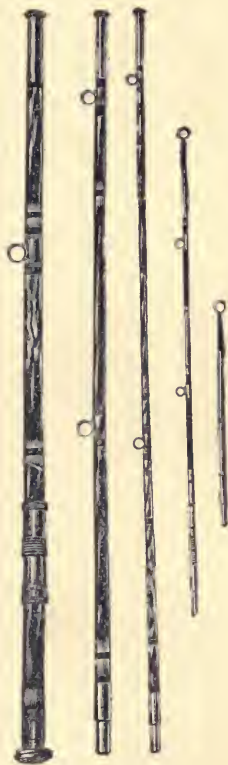
From a long acquaintance with angling and experiences of rods of many kinds, my own opinion is that nothing excels carefully selected East India bamboo canes for spinning, paternoster fishing, livebaiting, or trolling-rods; they are light in the hand, stiff, but have plenty of play, and make very powerful weapons. My favourite pike rods have, for the past twenty years, been made from these canes; and with them I have killed many heavy pike, ranging from twenty pounds, through the thirties, and up to thirty-six and thirty-seven pounds weight. These rods have two interchangeable tops, both of which pack into the butt—a great convenience, the angler having no spare top joint to carry when he is at the river side, or maybe the top lying about loose in a punt, at the risk of being trodden on and broken.

The rods are from ten to twelve feet long, according to which top is used, the short one being for livebait-snap and leger-fishing, the long top for spinning and paternoster-fishing; these two tops answer admirably for each method mentioned,

and render it unnecessary for anglers to cumber themselves with more than one rod when away on a raid among the pike. Rods so constructed for me twenty years ago are as perfect now as when they were made.

I may mention that Messrs. S. Allcock and Co., of Redditch, whom I have furnished with the correct pattern of my rods, manufacture them for the retail tackle-shops, at most of which they can be obtained; they are known as "The Jardine Pike Rods."

Since the 1883 International Fisheries Exhibition great advances have been made in the manufacture of fishing-rods in England, especially rods built up from split canes, first introduced from America, and much improved upon by Hardy Brothers, Alnwick. Messrs. C. Farlow and Co., 191 Strand, manufacture a very perfect pike rod of built cane, which has a solid cork grip with the cane continued through it to the butt end, and this imparts great casting power. The rods are made with and without steel centres, the steel giving remarkable strength with flexibility; they are fitted with lock-fast



"JARDINE" PIKE ROD.

ferrules; the butt and top-ring have revolving centres, the others are guard-rings; they have two top joints; the 10 ft. 6 in. rods weigh 1 lb. 2½ oz., but they are made also 11 ft. and 12 ft. in length,



PIKE ROD
(MESSRS. FARLOW AND CO.).



PIKE ROD
(MESSRS. CARTER AND CO.).

which weigh a little more, are stiffer, and adapted for extra large pike, such as we have been told exist in the Irish loughs. Messrs. Carter and Co. 137 St. John Street Road, E.C., have pike rods

built of double split cane with a steel core, that are very powerful, and measure 12 ft. with the long spinning top, and with the short or trolling top 11 ft. The ferrules have a patent screw on the end of the inner ferrule plug, a neat device that effectually prevents the joints coming apart. The grip is of solid cork, with the cane continued through it to the pneumatic knob. Guard and revolving-rings and improved winch-fittings complete this admirable weapon, which is also exactly adapted for spinning for salmon.

Rods composed of ash for the butt, the second and third joints of bamboo, and the top of solid cane and greenheart, are excellent for spinning and paternostering, and if the last 12 ins. of the butt was bored a short trolling top could be carried in the hollow. If well made, these rods are well suited for pike anglers. Much depends on the ferrules, which should always be made of sheet brass hammered round on a steel mandrel, and not lengths cut from soldered tubes, which are liable under a strain to split or rip. In all the rod-joints the bottom plug, as also the thin peg, should be double-brazed: both must fit into the ferrule so accurately that no water may trickle down into the joint from the wetted line as it passes through the rings when spinning, &c., and penetrate the ferrules, making them stick and difficult to withdraw when taking the joints apart preparatory to packing up rod and tackle at the close of a day's fishing. A good plan is to grease the plugs, also inside the ferrules before use; when the ferrules stick, turn them slowly in the flame of a lighted match or candle for a few seconds, when the joints will come apart. Rods are now constructed with suction-ferrules,

which fit so accurately that the joints cannot come asunder unless some force is used ; but if fastenings are necessary, then the ordinary small metal loops may be bound on to the ferrules and plugs, which, whipped round with three or four turns of thread, will effectually prevent the joints coming loose under the swinging and swaying of casting a spinning-bait or when trolling. There are improved methods for fixing joints that have been applied to fishing rods ; among them are the lock-fast and the bayonet-fastening.

The rings on a pike rod should be large and all of one size. Mine measure $\frac{5}{8}$ inch inside diameter,



GUARD RING.

and are of the kind known as guard rings ; the line cannot foul or twist round them, and accidental tangles easily pass through, a matter of great importance when playing a heavy fish.

The bridge ring is another useful one, round which the line cannot foul. With the snake rings,



BRIDGE RING.

I have repeatedly found lines to jam (especially when fishing in frosty weather) at the angles where the wire is bound on to the rod-joints. The best material for rings is phosphor-bronze ; it is light but strong, and does not rust ; the butt and next

joint should have two rings on each, the third and top joints three on each.

For top rings of pike rods, I find those the best with a revolving inside ring that can be moved round when it shows signs of wear by the friction of the line cutting notches into it.

The butt ends of pike rods should be fitted with an india-rubber knob, which may be obtained at any of the best tackle shops. These flexible knobs are essential to the comfort of anglers, who, when spinning or trolling, often experience inconvenience



INDIA-RUBBER KNOB.

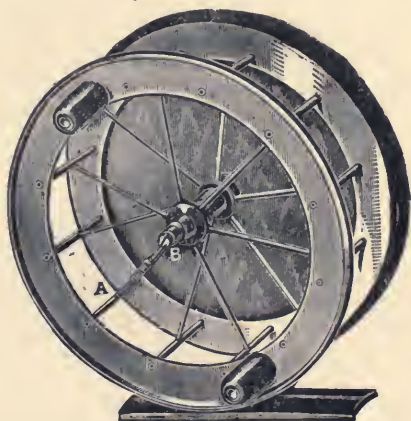


PATENT PNEUMATIC BUTTON.

from the pressure of the hard wood or brass against the groin, this being the usual position the end of the butt occupies in pike-fishing. Messrs. Carter and Co., of 137, St. John Street Road, E.C., have patented an excellent one of bronze and india-rubber. Half a ball of thick rubber is fixed to a metal plate, which, by means of an ordinary screw, is attached to the butt of the rod. This half-ball is hollow, and a small air-hole is drilled in the metal plate. Upon pressure being applied some air is forced out, sufficient to bring about a nice softness in the ball, invaluable when spinning. When the pressure is removed, the ball automatically fills with air; this ball or button should

prove a boon to the salmon or pike-angler when playing a big fish.

The reel should not be less than $3\frac{1}{2}$ ins. diameter, —four inches is better,—and sufficiently large to hold a hundred yards of pike line ; eighty yards is enough for spinning. Reels should always have large barrels or an arrangement of wire pins, to increase the circumference of the barrels,



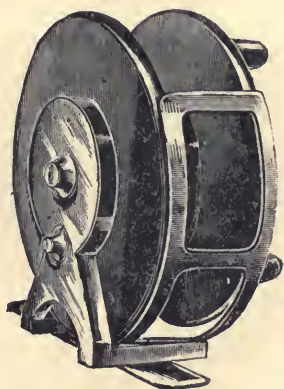
THE "COXON" AERIAL REEL.

so that the line may be wound up very rapidly. Many capital reels are now constructed of wood and metal, or of vulcanite and metal. Slater's is a clever combination of a check and free-running reel, and admirable for those who like to spin "off the reel"; personally I prefer the Thames style of spinning, *i.e.* off the hand, which method I will describe later on.

The "Coxon" aerial reel, lately patented by Messrs. S. Allcock and Co., Redditch, is a beautiful piece of mechanism, and so far as lightness is

concerned there are none made to compare with it ; but although weighing so little it is a strong reel, from which long casts can be made. The 4 and 4½ inch have check-actions and large drums to hold thicker lines for pike-fishing.

Eschew all reels that have handles constructed like cranks, for the line is very likely to get under them, an almost certain breakage occur, and a



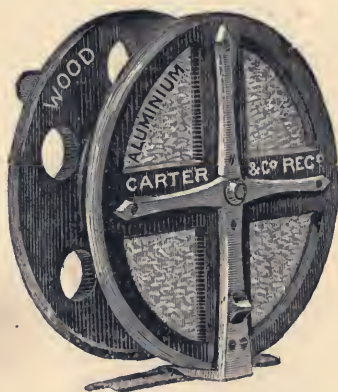
ALLCOCK'S "SIMPLEX" NOTTINGHAM REEL.

severance of the attachment existing between the angler and a fish he may be playing.

Only use those reels that have the handles fixed on to the side plate ; the advantage of this construction will be apparent to every pike-fisherman. The best Nottingham reels have a metal guard placed round the centre part that revolves. This, if ordinary care is used, keeps the line from over-running and forming loose coils or other complications ; and as they also have a spring check which can instantly be thrown into gear or out of gear,

these reels can be advantageously used when wading or spinning from rough reedy banks, or among bushes, and the necessity of coiling line on the ground, with the consequent risk of entanglement, is avoided.

But there is yet another reel on the Nottingham principle that comes very near perfection. It is made by Carter and Co., and known as "The New Reel" for pike and sea-fishing. It is strongly con-

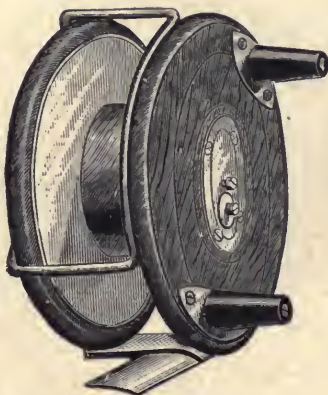


THE NEW PIKE AND SEA REEL.

structed of wood and brass, but is light and durable, has an aluminium disc and back-plate; will not warp, and therefore cannot jam; and is made in various sizes. The 4 in. pike reels hold over a hundred yards of line, and having a check-action there is no risk of overrunning.

The defect of the ordinary wood reels without a check-action is their liability to overrun and form knots and tangles in the line, which generally occurs when an angler is playing a fish, and results as a rule in the loss of the fish and the angler's temper.

Another danger of these cheap reels without check is—if the pressure of the finger on the periphery of the revolving wheel be for an instant removed, the line runs so freely as to produce an excess of slackness, which is a greater evil possibly than the other just mentioned ; for, with a good fish on, and having, may be, to follow it rapidly along the river-bank, possibly over broken ground, nothing could be more trying to the angler than having—through a slack line—no control over his fish. Another



THE "SUN" NOTTINGHAM WINCH.

serious danger in reels made wholly of wood is that on wet or even damp days they warp, and the portion that carries the line sticks fast and will not revolve ; this is a fatal defect. One of the best composite reels manufactured of wood and metal is, in my opinion, that known as "The Sun Nottingham Winch," made and patented by Messrs. Farlow and Co. These winches have an adjustable check and line guard, and are also made with bars placed entirely round them. A metal rim on the

inside of back-plate and a metal inner revolving plate prevent all possibility of sticking, without adding any perceptible weight to the reels, which are manufactured in five sizes, from 3 ins. diameter up to 5 ins.

Messrs. Carter and Co., St. John Street Road, have made winches of various sizes according to special suggestions of mine, and placed them on the market as "The Jardine Reels." They are constructed of metal and vulcanite. Eight wires



THE "JARDINE" REEL.

are riveted between the revolving plates, forming a framework round the barrel, thus increasing its size considerably and the rapidity with which line can be wound up. The larger sizes of $3\frac{1}{2}$ ins. and $4\frac{1}{2}$ ins. diameter, for pike-fishing, have a check-action, hold from 100 to 120 yards of line; they

have worn well and never required repairing, although I have had them in constant use for fifteen years. With these reels I have killed my largest pike. The smaller winches of same construction— $2\frac{1}{2}$ and 3 ins. diameter with a light check-action—are excellent for trout and grayling fishing, and revolve so sweetly that a rising fish may be struck "off the winch" without the slightest risk of breaking the gut, however fine and delicate the gut-cast may be. The perforations are now carried right through all the plates, whether of metal or vulcanite, thus reducing the weight and helping to air and dry the line.

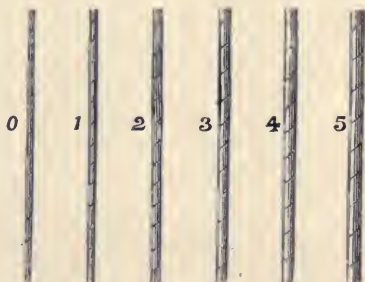
At the International Fisheries, 1883, some new winch-fittings were exhibited, including the Weeger fastening; but since then this and others have undergone considerable improvements, wherewith almost any size of winch-plate can be quickly and securely fixed to the fishing-rod. When the old-fashioned sliding-rings were the only kind known, unless the winch-plates fitted the slot, the winch frequently dropped off, possibly at the critical time of playing a fish, occasioning thereby entanglement of the line. Such a miserable mishap cannot possibly occur now, with the perfect fittings that are supplied by the London and best provincial tackle dealers.

Pike-lines are made of various materials, including cotton, flax and silk. Of the former, those manufactured by the Manchester Cotton Twine Spinning Corporation are fairly **Lines** good, being strong, although fine; but they have a defect,—they are apt to kink when wetted, as indeed do all lines that are spun and not plaited.

Theaker, of Nottingham, manufactures very good lines in various sizes, of which No. 3 and No. 4 are possibly the best for pike-fishing. No better can be obtained than the 8-plait waterproofed silk lines, sold by respectable dealers in London and country. A firm in Noble Street, E. C., has supplied me with a plaited pure silk line made for medical purposes, which I waterproof myself; it is extremely strong, but very fine, and wellnigh imperishable, if dried after use, and occasionally re-dipped into waterproofing, of which I give two or three receipts, and the mode of applying them. I am using one of these medical lines that I waterproofed six years ago; the worn and frayed ends I have broken off

from time to time, thus shortening the line ; but the remaining 50 yards or so, spliced to another old one, makes as useful a line as can be desired, and I don't like to discard an old friend that has killed big fish.

One of the best specially prepared lines I ever met with is the size of No. 3, made of pure silk, soaked in a waterproofing of oil forced thoroughly into the fabric of the line by pressure of air in an air-pump ; the line is pliant and elastic, and strong



SCALE OF SIZES FOR PIKE LINES.

PLAIT SILK LINES.

enough to capture a pike or any other fish up to 40 or 50 lbs. weight. The lines are prepared by and can be obtained at Messrs. C. Farlow and Co.

There are plenty of lines to be had that are low-priced, but not cheap, because they are badly made and untrustworthy ; they are made with a central core of some shoddy material, around which silk is plaited, similar to the way in which blind-cords and picture-cords are made, *i.e.*, worsted plaited round a core of string. These lines are usually dressed with a covering of varnish waterproofing,

and are sometimes sold as "American lines," although I believe they are really made in Germany; the varnish cracks as the line stretches, and the water gets to the central core, which quickly rots, and, after a few times using, they are unreliable, especially under the strain of a heavy fish.

It is a good plan always to unpick an inch at the end of a line and see if it is *silk all through*; if it is, a No. 3 size should be strong enough to hold any fresh-water fish that swims. About twelve years ago a friend of mine (now deceased) brought me from Saigon, in French Cochinchina, some silk fishing lines of marvellous quality and strength: for although they were only the thickness of the finest Nottingham roach-lines, which break at a strain of less than 6 lbs., these Saigon lines withstand a strain of 20 lbs., as tested and registered by a Farlow spring-balance. The lines are made of pure silk of the thinnest fibre, and, when unravelled, the fibres measure from 18 to 20 ins. in length. They are dressed with waterproofing, which withstands the action of sea-water; I have used them for the past ten years in both fresh-water and sea-fishing, capturing many big fish, some exceeding 20 lbs., and the lines have proved unbreakable, and appear to be imperishable. I have succeeded lately in obtaining these lines again, and very likely they will be procurable in London and country tackle-shops; and as the price will be only half that charged for the cheapest lines that are strong enough to hold large pike, barbel or sea-fish, there is certain to be a large demand for these Saigon lines.

The following is a recipe for waterproof dressing

for fishing-lines, which I have used for many years, and found to answer well :—

Of boiled cold-drawn linseed oil a pint, a wine-glassful of gold size, two tablespoonfuls of copal-varnish, poured all together into an earthen pipkin ; cover with a small cheese-plate or tin patty-pan to keep out dust, and place on hob of kitchen-stove for three or four days to simmer, stirring the ingredients occasionally until the gold-size and copal is thoroughly incorporated with the oil. Then coil the line loosely in an old pie-dish, pour enough waterproofing over the line to cover it, place paper or something over, and stand them for two or three days in a gentle heat for the line to soak thoroughly full of the dressing ; after this is done, take the end of line off the top coil, and draw all the line through a piece of an old kid-glove held between the fingers and thumb, squeezing out all the superfluous dressing, letting the line fall on to a large sheet of paper to save it from dust or dirt. When this is done hang it in coils on, or wind it round, an old clothes-horse or the backs of two chairs, where leave it for two or three days to dry ; then stretch it, on a warm day, in the garden between smooth nails driven into the walls or fence, or between trees, and polish the line by rubbing it with a little sweet oil on a piece of soft leather or old kid glove.

Another recipe is :—

Of boiled linseed oil, one pint ; beeswax, quarter of a pound. Put the oil in a gallipot and stand it in water kept boiling while the wax is added in small pieces ; when melted immerse the line and let it remain some hours in soak. When this is done the line should be tightly drawn through a

folded piece of wash-leather, held by the fingers and thumb, and then stretched to dry in a warm room.

Here is one from *Keene's Practical Fisherman* :—

“Half a pint of boiled oil, threequarters of an ounce of beeswax, one and a half ounce of Burgundy pitch ; one tablespoonful of copal varnish. Simmer the line in the mixture, which should not be raised to a greater heat than is necessary to quite liquify the component parts ; then treat the line and stretch it as described in the previous receipt.”

The next is taken from *Chitty's Fly-fisher's Text Book* :—

“*Dressing for Lines.*—To a quarter of a pint of ‘double-boiled cold-drawn’ linseed oil, add about one ounce of gold size ; gently warm and mix them well, being first careful to have the line quite dry. While the mixture is warm, soak it therein till it is fully saturated to its very centre, say for twenty-four hours ; then pass it through a piece of flannel, pressing it sufficiently to take off the superficial coat, which enables that which is in the interior to dry well and in time to get stiff. The line must then be hung up in the air, wind, or sun, out of the reach of moisture, for about a fortnight, until pretty well dry ; it must then be re-dipped to give an outer coat, for which less soaking is necessary. After this wipe it again, but lightly ; wind it on a chair-back or towel-horse before a hot fire, and then let it remain for two or three hours, which will cause the mixture on it to ‘flow’ (as jappanners term it) and give it an even gloss over the whole. It must then be left to dry as before ; the length of time, as it depends on the weather and place, observation must determine upon. By this means

it becomes impervious to wet, and sufficiently stiff never to close or entangle, the oil producing the former quality, and the gold size (which is insoluble in water) the latter, whilst the commixture prevents the size becoming too hard and stiff. A trolling line should be thus dressed every season at least."

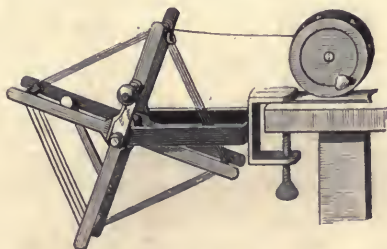
When the angler is away on a fishing tour, and new lines are not procurable, it becomes necessary sometimes to temporarily re-dress a spinning or trolling line, which may be accomplished by stretching the line between two trees or posts, and thoroughly rubbing in white wax, finishing or smoothing the line off with boiled oil placed on a piece of wash-leather, and rubbed lightly over. The wax and oil can be obtained at the nearest oil and colour shop.

Referring back to the sizes of lines, I find No. 2 quite heavy enough if made of pure silk, plaited; thick lines are not necessarily all of them strong. A fine line, carefully waterproofed with a dressing of linseed oil, copal or mastic varnish, and gold size, and thoroughly dried, will last for years, is always supple, and a pleasure to use.

It is always necessary to dry pike-lines, or indeed any and all kinds of lines after a day's fishing, by unwinding from the reel as many yards as are wetted, and hanging them in coils on anything convenient, such as the back of a chair, or winding the line round the back of two chairs placed a little apart, and leaving it there till dry; and when it is thoroughly dry, rubbing it with deer-fat or some other good medium for preserving lines, and making them buoyant, supple, and smooth.

A very convenient little machine for drying

lines can be got at Farlow and Co., Strand; it is collapsible, and easily packed in a fishing-basket or pike-bag. When the line is wound on it, air passes freely through every part and speedily dries it. Each winder is fitted with a screw-clamp, so that it can be affixed to a table or window shelf, and the clamp is arched to receive the "scoop" of winch, which can be placed or removed at will, so that the machine itself need not be removed after once fixing. An advantage in these winders is they prevent kinks forming in the line, which



LINE DRIER.

sometimes happens when it is hung up in coils, or wound round the backs of chairs.

The next tackles to be considered are pike-traces for spinning, livebaiting, paternostering, and trolling. Several new kinds of traces have of late been brought to the notice of anglers. The most novel are of thin annealed wire, and among the best and neatest are those made and sold by Messrs. C. Farlow and Co.; they are particularly strong, and so fine that they show but little when in use. The "Hercules" patent rust-proof traces, manufactured by Messrs. S. Allcock and Co., are practically unbreakable and excellent tackles for the capture of heavy fish; they also make gimps of platinum

Traces

wire—a great improvement on the old-fashioned brass gimps, now seldom used, being too bright and so easily seen by the fish. Next to platinum is copper gimp; it does not show much in the water; it is also strong and flexible. If nothing else than brass can be got, it can be coloured or stained by soaking it in a solution of bichlorate of platinum mixed with water (one part of platinum to six or eight of water), then dried before the fire; but the solution must be very weak, as it is so powerful that it destroys gimp quickly. I find a good plan is to hang brass gimp in the fumes of burning brimstone, *i.e.*, flour of sulphur; this will stain it a deep copper colour and not rot the gimp. An iron stove-pipe placed on end, the gimp coiled loosely and hung inside at the top, covered with a slate, and the burning sulphur introduced at the bottom, the gimp remaining in the fumes a few minutes, this answers capitally.

Personally I much prefer pike-traces made of stout salmon-gut, or of twisted trout-gut, three strands, tapered, and stained blue or grey (*i.e.*, the tint of water with a weak solution of indigo, or Stephens's blue-black ink and water, or "water-weed" colour, *i.e.*, light olive-green), by first soaking the gut or trace in an alum mordant, and then in a solution of indigo mixed with sufficient turmeric to produce the shade required.

"Red-Spinner" (Wm. Senior) says:—

"It is always best when pike-fishing to use a trace of twisted gut; the use of coarse gimp is now generally acknowledged to be a mistake, and the deterioration of gimp some little time ago led to a more general adoption of the twisted or double-gut trace. Gimp, however, is essential for the hooks

when angling for fish with such a formidable furnishing of teeth as pike."

The following recipes for stains for gut are selected from *Keene's Practical Fisherman*:—

"*Light Yellow or Amber*.—One and a half scruples of quercitron bark, one scruple alum, one scruple cream of tartar, sixteen grains of madder, four drops of muriate of tin. Immerse three minutes.

"*Another Amber Stain*.—Steep a large handful of the common barberry tree in a pint of boiling water, and let it stand for a couple of hours.

"*Another Green Colour*.—Steep the gut in strong green tea for twelve hours.

"*Light Brown Stain*.—Steep in strong coffee.

"*Bluish Green*.—Boil a handful of logwood in a pint of water, and add copperas until of a sufficiently deep colour. Immerse the gut, when the preparation is cold, until the requisite hue is obtained. A piece of copperas the size of a pea is ordinarily quite sufficient.

"*Light Green*.—Boil a piece of green baize and steep in the liquor while it is warm.

"*Light Yellow*.—Steep in tea or coffee lees.

"*Red Water Stain*.—Steep in a teacupful of black tea, till of sufficient depth of tint."

It is necessary to have a lead on the "spinning trace," placed from two feet to three feet above the bait, of sufficient weight to sink it (whether a natural or artificial bait), about a couple of feet under the surface of the water; and the lead should be so formed or shaped as to prevent twists or kinks running up the line; there should also be three swivels, or one double and one single swivel between the lead and hooks, to assist the revolving or spinning of the bait.

There are various kinds of leads, but all of them should be so constructed that their greatest weight,



DOUBLE BOX SWIVEL.

DOUBLE BOX SWIVEL, WITH
IMPROVED HOOK.SINGLE BOX SWIVEL, WITH
IMPROVED HOOK.

DOUBLE WIRE SPRING HOOK SWIVEL.

or the centre of gravity, hangs below the level of the trace, and then no twisting or kinking can occur in the line above the lead. Among the best

FARLOW'S IMPROVED SPINNING LEADS, WITH HOOK SWIVEL AT
EACH END.

for use on spinning traces are the "Pennell leads," which are made in four sizes from $\frac{1}{4}$ oz. to $\frac{3}{4}$ oz. weight, or an improved lead made by Farlow and



"ARCHER-JARDINE" LEADS.

Co., and the "Archer-Jardine" non-slipping detachable leads: the latter are made in twelve sizes, commencing at $\frac{3}{4}$ inch of $\frac{1}{8}$ oz. weight for chub and

perch-fishing,—the middle sizes from $1\frac{1}{2}$ inch to $2\frac{1}{2}$ inches for pike-fishing, and the largest, from 3 inches to 4 inches which are used in sea-fishing: these detachable non-slipping leads can be placed any distance from the bait by coiling the trace in the grooves and wires; and if necessary instantly shifted to another position: or a heavier or lighter lead put on by untwisting the trace; if to be used when spinning for pike, or other fish, bend or curve the lead between fingers and thumb, and this will prevent the annoyance of kinks or twists forming in the spinning line. These leads are manufactured by Bartleet and Sons, of Redditch, and can be got at any of the London or country fishing-tackle shops. In the early part of this century, trolling with a dead-gorge-bait was the mode usually adopted for catching pike, and the art of spinning a natural bait was almost unknown, or at any rate had not been elevated to a science; swivels were used then which were badly constructed, and leads were wrong in shape, *i.e.* pipe-leads, or a number of shots weighted the trace, and rolled in the water, or rotated, allowing kinks to run up the line, tangling and crinkling it to such an extent that much of it had to be taken off the reel and straightened, thus incurring loss of time and discomfort to the angler. Now, owing to improvements in the shape of leads and perfect lines, &c., all these inconveniences have ceased to exist; but still as tangles and kinks do sometimes occur, the best way to take them out of the line is to draw twenty or thirty yards through the ring of the top-joint, and trail it two or three times backwards and forwards across a grass field, until all the twists are got rid

of, when spinning may be recommenced with some degree of pleasure.

The next among the more important tackles to consider are spinning-flights, of which there are several patterns, all good of their kind; and as spinning is probably the most popular and sporting, as well as the most successful, method that can be employed to capture a quantity, where pike are rather small—for a lifelong experience has convinced me that much the largest fish are caught by livebait-snap and paternoster fishing—I will now particularize some of the best spinning-flights of the present day, their construction, &c.; and, where all are so near perfection, without being invidious, or giving the palm to either of them. The Pennell spinning-flights are made in three sizes—

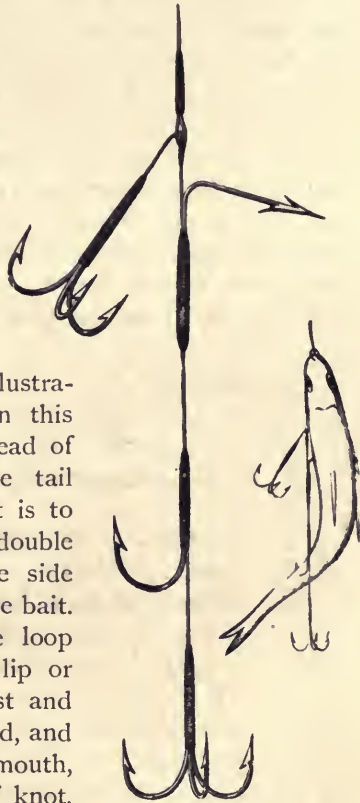
No. 1 flight is for small gudgeon, dace, or bleak, from 4 ins. to 5 ins. long, and is suitable for small jack of 3 lbs. to 5 lbs. weight.

No. 2 is for larger gudgeon, or small dace, from 5 ins. to 6 ins. long, and is suited to small pike from 5 lbs. to 8 lbs. weight..

No. 3 for dace of 6 ins. to 7 ins. long, are the size of tackle for pike of 10 lbs. and upwards.

In these flights Mr. Pennell has discarded his previous shape of a curved reverse tail-hook, and adopted a straight reverse-hook instead, which is an improvement, as it is easier to put the bait on the flights, and when on it holds more firmly, lasts longer, and spins brilliantly. Rejecting the construction of the now almost obsolete "Thames flight," Mr. Pennell advocates "flying triangles;" they certainly add to the killing powers of the tackles, but are apt (I think) to gather floating weeds.

The next flight I describe is the joint invention of Mr. H. C. Pennell and Mr. A. N. Bromley, and is known as "Farlow's Registered Flight;" it is used by many practical pike fishermen, and considered one of the most simple and perfect tackles made. To bait the flight pass the wire loop under the gill-cover and out of the bait's mouth, then put the single hook through the back (as shown in the illustration), pull gently on this hook towards the head of bait, and when the tail assumes the curve it is to retain, stick the double barbed pin into the side and right through the bait. Then pass the wire loop through the upper lip or nose of the bait first and the under lip second, and again under itself at mouth, thus forming a half knot, which never slips. These tackles are also made with sliding lip-hooks, of which the "Faciles" invented by Emil Weeger and made in four sizes are excellent ones, for they can be slipped up or down without injuring the



"FARLOW'S REGISTERED
FLIGHT."

(The gimp twelve inches long).

gut or gimp, which is not the case with some other lip-hooks.

It will be observed that the gimp is to be twisted three or four times round the shank and the hook thus fixed in its proper place; for the correct position of the bait when attached to the flight depends mainly upon the nice adjustment of the lip-hook; this can easily be determined by the curvature of the bait's tail (see the small sketch of bait on previous page); if the lip-hook is drawn too closely the shoulder of the bait will be bent, and it will not spin correctly and brilliantly, but will "wobble," which, as a rule, is not an attractive motion, although pike sometimes will go for a wobbling



FARLOW'S "FACILE" LIP HOOKS (REGISTERED).

bait, which has the appearance of a wounded fish swimming with difficulty.

The "Francis" flight is a capital tackle that has stood the test of time, and is still preferred by many an expert among the older school of pike-anglers. It is strong but simple in construction, not likely to get out of order, the bait is easily put on, and the one flying triangle as placed midway on the trace shows but little, yet is deadly. This flight would be improved by discarding the lip-hook and substituting one of the "facile" hooks. There is another tackle, known as "Storr's flight," that is simple, convenient, and effective. It consists of one large triangle; this is attached to 9 inches of gimp, which by means of a baiting-

needle is passed through the bait from the vent and out of its mouth, one of the hooks of the large triangle jamming against the vent and there remaining. A small triangle on an inch and a quarter of gimp is slipped over the hook-gimp and flies loose above the shoulders of the bait, and a sliding lip-hook completes the tackle.

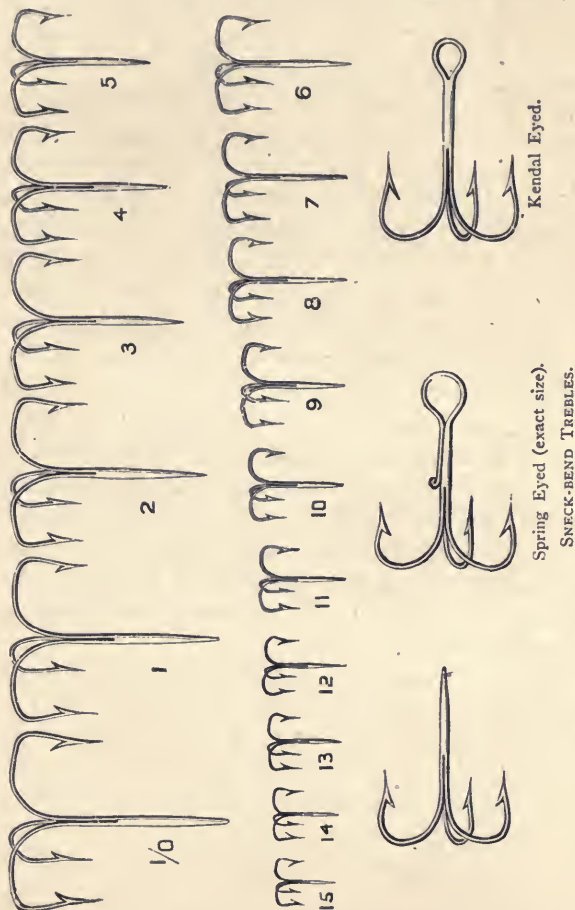
To bait a spinning flight lay the bait in the palm of the left hand, take the tail-hook by the upper part of bend nearest the barb, and pass the point into the side of the bait about half an inch from the base of the tail, and press the point through the flesh upwards and out again; or, if the flight has an end triangle, pass one of its hooks barb upwards through the flesh and out again, as close to the tail-fin as is possible. Then insert the "straight-reverse," and push its barb quite through the bait; or if a small reverse hook, press home the barb, so as to secure or fix the tail part of bait at the curve or angle, which a very little practice will show is the correct one.

Then having adjusted the lip-hook to the exact length of the bait, pass it through both lips, the upper one first if a gudgeon—but the lower lip first with dace and roach.

The flying triangle is intended to hang free and not to be hooked into the bait; the shoulder and body of which should hang quite straight when affixed to the flight, the tail portion of the bait only being curved, as shown in the small cuts; and these instructions being correctly carried out, the bait should spin in a brilliant manner, and look very life-like.

Another very important element in spinning flights is the shape and make of the treble-hooks,

or triangles, of which many are sold faulty in construction and badly tempered. I have used
Hooks some that were so soft that the hooks straightened out at the bend and the fish escaped,



while others were so brittle that they snapped at the barb or bend; others were badly brazed, and

the hooks came apart. The best I can discover are "sneck-bend Trebles." Treble hooks with eyes also often prove very useful to pike-anglers, and both kinds are made in various sizes. (See illustrations.)

Some triangles are bronzed, others are tempered a blue tint ; but those that are the natural colour of the wire they are made of are the best (in my opinion), as they assimilate more nearly to the colour of the spinning-bait, whether it be a dace or gudgeon.

CHAPTER IV.

SPINNING—THE WATER—HOW AND WHEN TO SPIN.

THAT branch of the angler's art which approaches more nearly to the elegance of fly-fishing, and is certainly a more artistic way of capturing pike than any other method, is spinning; and as I have already described the rod, tackles, &c., necessary, I will now ask my reader to accompany me to the river, and spin for a pike.

We will put the rod together with the long top-joint, fix the reel in its place, draw the line through the rings, put on the trace and flight, with a five-inch dace for the bait, and, seeing that it spins nicely, begin by fishing all the nearest water first; taking off from the reel enough line to make a cast of, say, ten yards; then drawing the bait up to within six feet of the rod-top, the line held between the left thumb and fingers, grasping the rod in the right hand, with the knob on the end of the butt placed against the right groin, and the rod at an angle of 45° , we turn the right shoulder towards the place we desire to cast the bait to;

Spin-
ning
for
pike

then with a gentle but accelerated swing of the rod, as the "heft" or strain on the line is felt we release it, and the bait should reach the spot wished, and drop into the water with scarcely a splash. Frequent practice will induce skill; then the distance covered may be increased, and the angler will become proficient. It is not of much use spinning water exceeding six feet in depth; choose quiet streams and glides adjacent to sedges and spear-grass, between weed growths, or near beds of water-lilies, whose leaves and stems have been cut off and destroyed by winter frosts. Shallows, near deep holes and weirs, are excellent for spinning, and likely to yield good fish.

Lower the rod point to within a couple of feet of the surface, and holding it at an angle to the bait, begin by drawing the line in at a moderate speed with the left hand; and if a very small sweep or stroke of the rod top is given between the intervals of drawing in the line, it adds to the attractiveness of the spin. The draws or pulls and movement of the rod-top must be varied in quickness and length according to the depth of water; the left hand making a draw about every two seconds or a trifle less, each length of line drawn in being usually about four feet: and a cast should be made over every two yards fished.

The bait should not be lifted from the water until close up to the bank or boat; pike frequently lurk under the nearest bank, especially if sedges or reeds grow in and fringe the water; sometimes pike follow a spinning bait all across the water to the boat or bank, making a desperate dash at the last moment as if afraid to lose it. I have known them to leap out and seize the bait savagely—a

foot from the surface of the water—to their own discomfiture.

Spinning is grand sport when pike are roving about in search of food ; then is the best time.

Spin your bait a yard or two in front of a feeding fish, and ten to one it will be seized with a rush that will make you burn with excitement. I well remem-

**Spinning
the
finest
sport**
ber when the late H. L. Rolfe (the Landseer of fish painters) was my companion, on December 20th, 1876, fishing a grand expanse of water where pikes fed fast and furiously all that short winter's day. My friend was not very well, and as the weather was cold he sat for some time in the stern of the boat wrapped up in a rug, leaving me to do the fishing. Pike were breaking the water all around us, and the bait had only to be spun near a fish to be instantly seized. The results of that day's sport were fifty-four jack and pike, the largest 17 lbs., and three fine perch, from 3 lbs. to 2 lbs. each. The waggonette arriving, it was time to pack up my rod and tackle ; but on nearing the boat-house I made one parting cast, and landed a pike of 11 lbs.

When near to trees or weed-beds, and there is danger of casting the bait into them, the angler should let his line run lightly through his left hand, instantly closing his fingers and thus putting a check on it, if the bait is likely to fall where it may get hung up in boughs or other obstructions. By thus arresting his cast and letting the bait fall into an open place, he will avoid many breakages and save much tackle during a day's spinning, especially in a narrow river where bushes and willows margin the water, or old pollard trunks

jut out every here and there ; for if the flight gets firmly stuck in a tree, or embedded in a growth of reeds, when a strain is put on, something must go, possibly the trace, whether it is of gut or gimp ; the released line flies back, for on the opposite side of the stream, swaying backwards and forwards on a branch, maybe, remain his flight and trace, with perhaps two or three yards of line. How does the practical spinner go to work ? To borrow a capital angler's (Mr. H. B. Bromhead's) description : " He makes no erratic throws, hooking into reeds or floating *débris* ; his bait, properly leaded, shoots evenly and swiftly to the desired haven, like an arrow from the bow. Right across the river, 25 yards if an inch, it falls right under the drooping boughs of an old willow, in a quiet eddy caused by a small bay in the bank line.

"With but little splash the bait drops into the water, and after sinking a foot or two is drawn evenly across the river. It is a pikey bit of water, a fringe of waving, rotting, sepia-tinted reeds bordering the bay. If any kind of the species *Esox lucius* possessed an especial retreat, this is the one.—Is master pike at home to-day ?—I think he is.—A swirl in the water, a sudden resistance on the line, a gleam of light colour in the dark green depths of the river flowing smoothly along, as a mighty fish seizes the bait and endeavours to return to his lair to munch his captive at his leisure.

"Not so fast, my friend. That 10 foot of green-heart and lancewood is struck upwards smartly, the line quivers like an arrow embedded in the target, and a right royal battle has commenced. Gamely the fish struggles, vainly endeavouring to once more take up his quarters in those willow

roots, which for months past have been his home, a place carefully avoided by every well educated roach and dace in the water.

“It is not to be, though ; two or three frantic rushes on the part of the fish, as many steady pulls by piscator, and master pike is brought within reach of the gaff or landing net.”

There is more life-like motion and brilliancy imparted to the spin of a bait by the Thames style (which I have endeavoured to describe on page 73) than by the Nottingham method of spinning off the reel, which has (in my opinion) too level and jog-trot a motion and altogether lacks the darting and varied speed, and flashing swerves, which can be imparted to the lure by an adept in the Thames mode, and which are so peculiarly tempting to pike, and often induce them to feed even when not particularly hungry ; and notwithstanding what Mr. Baily—a great exponent of the Nottingham style—asserts in his *Angler's Instructor*, the substitution of a mere mechanical motion for the combined movement of the hand and rod is one great objection to the method of winding the bait in on a reel. Another fault is the large proportion of inaccurate shots that are made by the Nottingham mode of casting off the reel. I have seen Trent anglers, also those of Thames, clever and successful fishermen, who had adopted the Nottingham style, make most erratic shots, the bait not falling or reaching within many yards of the spot desired, or possibly deposited in the overhanging branches of a tree, especially if the finger pressure on the periphery of the reel was for an instant removed ; but a proficient in the Thames

method of spinning should be able to drop his bait on to a soup plate, at twenty yards distance.

To do this he would withdraw the necessary length of line from his reel, and by a sort of shuttle movement (as the late Francis Francis described it) of the fingers and thumb, gather the line in a series of small coils on to the palm of his left hand—easy to do, when the knack is acquired—and then making the cast, and letting the line run through the fingers, but checking it if necessary just sufficiently to insure the bait falling exactly into the place wished ; in fact, I have played and killed jack, “on and off my hand,” *i.e.*, fish which have not exceeded 5 lbs. weight. Avoid dropping the line on the ground, or the floor of a punt ; it is liable to be trodden on and damaged by a grit bruising or cutting it ; or trouble may ensue in the shape of a tangle, or worse—a breakage ; endeavour to wind the loose line on to the reel as quickly as is possible ; and then play the fish “on and off” the reel.

It need scarcely be said that the Thames is a splendid river for spinning, varying, as it does over all its course in shallows, and deeps, the habit of pike being to feed on the shallows in the morning and evening, and to retreat to the deeps in the hotter and brighter part of the day, where they may be caught by paternostering and livebait snap-fishing ; which kinds of angling will be described in my later pages. The following are some capital places on the Thames for spinning in late autumn and winter when frosts have decayed, and floods have cleared away, the weeds ; but the angler will require a punt, to be enabled to command all the

The best
waters
of the
Thames

best water. The reach below Culham Lock, and at Clifton-Hampden; from Streatley to Harts Wood; Maple Durham to Caversham; from Sonning and thence half-way towards Ship-lake; Wargrave to Henley; Hambledon Lock to Medmenham; from Temple Lock and on past Bisham Abbey; Marlow-weir to Spade Oak; the water under Clevedon Woods; from Taplow to Monkey-Island and thence to Water Oakley; the old river at Old Windsor, and the shallows by the Bells of Ouseley and Magna Charta Island; the river from Staines, round Penton Hook, to Laleham. Many of the above-named waters vary from four to six feet in depth, hold plenty of jack and pike, and if carefully fished should well reward the persevering angler. The Kennet from Hungerford to Reading is another first-class stream, celebrated for fine pike, of which fish the late Mr. Francis Francis made many large captures; once (I think at Earl Craven's, near Newbury) he put on record nearly 3 cwts., the result of a day's spinning executed by himself and a friend. But fishermen have so increased in numbers of late years, that such catches, or anything approaching them, are few and far between. The Avon, which rises in Wiltshire near Devizes, is fishable for pike at Bulford, and all through its course from thence to Salisbury, and on past Ringwood, contains many fine stretches of water peculiarly adapted for spinning. At Longford Castle, through the kind permission of the Earl of Radnor, I once, with Francis Francis for my companion, had two days of grand sport; and just below Braemore Bridge, Mr. C. H. Pennell, some time since, caught

twenty jack and pike, within the hour, spinning. At Downton, Ringwood, and some other places are "open" waters, which can be fished by the payment of a daily fee. The Frome, Dorsetshire, is another capital river for the pike-spinner; and where and when permission can be obtained, is easily to be fished from either bank. In the first years of my acquaintance with this river, I had many fine fish out of it, some of the pike exceeding 20 lbs. each, but I am informed it has been much overfished during the past ten years and every small jack retained, to the depletion of those fish in the river. If all jack under 4 lbs. were carefully unhooked and returned uninjured to the water, the Frome would again become one of the best pike rivers in the West of England. (See page 31).

Spinning has its charms and advantages, for with no sloppy bait-can to carry, but a couple or three dozen selected baits instead, packed in bran, tackle case and flask in pocket, rod in hand, gaff and fish-bag in sling, warmly clad, and well booted, nothing can be more enjoyable than to wander beside a "pikey" river, spinning all the likely places, and catching fish here and there.

When a pike seizes the bait, instantly give a firm and decisively determined draw of the rod top (rather than a strike) by smartly moving the rod point to either the right or the left, *i.e.*, contrary to the direction in which the fish may be running. Or it may be necessary to elevate the rod top smartly; but any way it is the decided draw, and the firm hold on the fish for a second or two, when it is making its first efforts to escape, that will most

surely bury the hooks deeply and well over their barbs. Some anglers advocate a succession of short, sharp strikes, but these seldom drive the hooks home, and often result in snapping the top joint, or the trace, at possibly a knot or a swivel.

In keen frosts, however, it is not of much use spinning, for in such weather pike retire to the deeps, and the best way then is to paternoster or to fish snap, with the livebait as deep down in the water as possible. Of natural baits for pike-spinning, none equal small dace and gudgeon, both of which, because of their shape, spin better than roach, and being tougher, last longer on the flight. Next to them is a small roach or chub; but when waters are somewhat discoloured or swollen, a dace of rather larger size, also because of its brighter scales, may be used with advantage.

In London and other large cities and towns livebait can be obtained at the fishing-tackle shops, but in country places, where it is necessary to catch them, a sweep-net or casting-net must be used; and as some practice is required in the using of the latter net, it is wise for the caster to put on a waterproof, to prevent himself getting wet. A few handfuls of groundbait thrown into the water which the netsman can most conveniently cover with the expanse of his cast-net, will draw the small fish together and ensure a catch. A bait-can will be found necessary to keep the baits alive, for stale, flaccid baits are not much good for spinning, and from the livebait-can they may be transferred to the punt-well, or a floating perforated bait trunk, or one with zinc gratings, where they will live for weeks if occasionally fed with gentles or small

worms, and the angler will have a store always at hand, and ready for use.

I have already mentioned packing spinning-baits in bran, which preserves the silvery appearance of their scales, and washes off the moment the bait is in the water. Another good plan is, immediately after they have been killed—



CASTING-NET.

by giving them two or three sharp flips with the finger, or tap with the pocket-knife handle, or with a pebble on the back of the head—to wrap them in a soft, damp cloth, which may be re-moistened from time to time ; this will preserve their brightness, and the scales will not slip, I should not recommend them to be put into salt or brine ;

boracic acid or powder is a good medium to preserve them, so also is glacialine. I have found methylated spirits to answer admirably, and that in it baits will keep tough and bright for months. Previous to going (some years ago now) to Galway and Lough Corrib for three weeks' salmon and pike fishing, I obtained two one-gallon jars, and twelve dozen small Thames dace, which I killed in the way already described, and then dropped head first into the jars, which were half-filled with methylated spirits of wine. They answered admirably, and I killed many fish with them spinning Thames fashion.

The Irish boatmen had never seen dace before then (for there are none of those fish in Ireland), nor were they acquainted with my mode of fishing. They always rowed a boat about the likeliest water, while the angler, with two rods, towed or trailed two baits thirty or forty yards astern. I brought some of those baits back to London, and used them the following season, when they were as bright and perfect as when put into the spirits. My friend, and oftentimes angling companion, the late Mr. H. L. Rolfe, imparted to me the advantage of preserving spinning baits in methylated spirits, and he repeatedly used large whitebait treated the same way, for the capture of large trout, finding them excellent on light spinning tackle, and superior in brilliancy and toughness to minnows, or any bait he had previously fished with. Preserved baits, such as small dace, bleak, gudgeon, sprats, &c., suitable for pike-spinning can now be obtained at most of the London and provincial fishing-tackle shops.

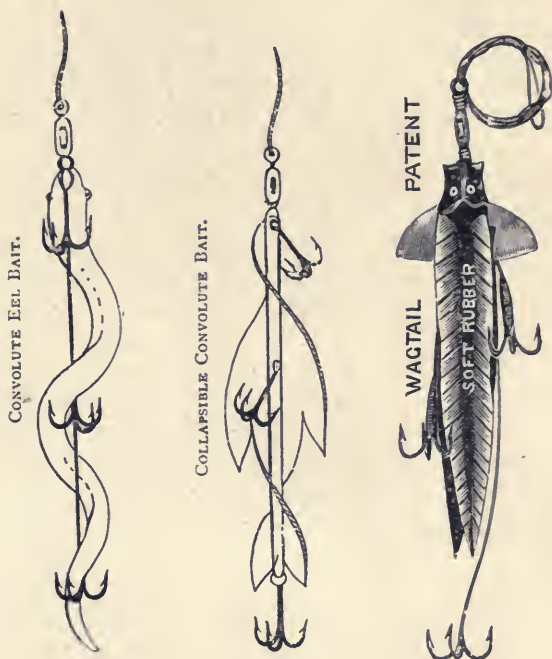
Six or seven inches cut from the tail end of

a freshly-caught eel makes a tough and lasting lure ; which, having also a very life-like appearance, often proves a very deadly bait.

When fishing Corrib, I caught a very large pike with an eel tail. To construct this lure, get an eel eighteen inches long, and cut off eight inches of its tail, turn back the skin for two inches, and cut through the exposed flesh ; form the head by straightening the skin and tying it round with a waxed thread closely up to the flesh ; again reverse the skin over the ligature and sew it round to the body of the bait, and then place it on a flight in the way already described for the mounting of other spinning baits. Salted eel tails last a longer time, and are useful when fresh ones are not to be got. Whole eels of eight or nine inches in length make capital pike baits. I have constructed imitations of them in india-rubber, which kill almost as well as the natural, and have patented them, under the name of "Convolute Eel Baits," of which the illustration is one-third the size of the baits. The wire in the centre of the rubber allows them to be lengthened or shortened in the coil, thus altering the rapidity of spin. In small sizes, three or four inches long, they are deadly baits for fishing weirs, &c., for large trout ; also for pollack, bass, and other sea fish.

The next illustration is a representation of the "Collapsible Convolute Bait," in which the india-rubber bends under the pressure of the fish's jaw—and the hooks are very firmly fixed. The "Helix," another india-rubber spinning bait I have lately invented, is a very tempting lure. In this bait, the spin or rotary motion can be instantly reversed by unfixing the rubber from the end

clamps, and coiling it the contrary way—this change of spin prevents any twists or kinks forming in the line—and the weight being within the body of the bait, the usual lead is not required on the trace, thus the objectional double splash is



avoided when the bait falls into the water, (see illustration).

There is a large variety of artificial spinning-baits, and some of them are very close imitations of natural fish. Carter and Co.'s well known "Wagtail Baits," are also constructed of soft rubber

with metal fins, and enjoy a good reputation as killing lures. I have had good sport when using them myself, pike go for them eagerly ; they are made in other sizes, suitable for salmon, trout and perch. The same firm have recently made a novel

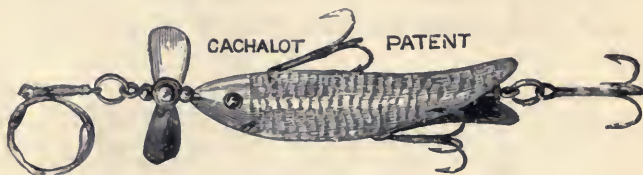


JARDINE'S "REVERSIBLE HELIX" SPINNING BAIT.

departure in the "Cachalot"—a metal bait, like a natural fish, which has a slow rotary motion : but at its head there is a spinner which revolves with great rapidity. Anglers who use it (and they are many) tell me it is a slayer of pike.

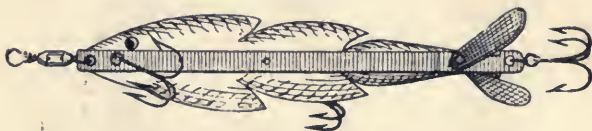
With the view of doing away with that horrid

bugbear, the kinking and twisting of spinning-lines, I have recently perfected a little invention of my own, made of metal and india-rubber, which



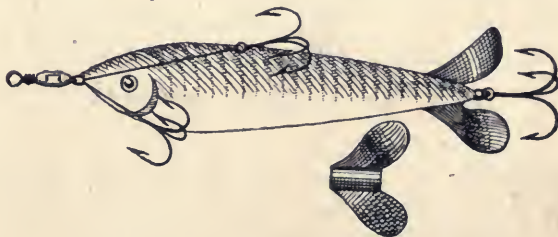
THE "CACHALOT."

differs from Brown's reversible pectoral fin "Phantom" baits, inasmuch as mine have reversible (and some of them interchangeable) tail-fins, by which



JARDINE'S "REVERSIBLE TAIL" SPINNING BAIT.

the revolving motion of the baits can be changed to either the right or the left as the angler chooses ; they spin accurately, have a natural fish-like

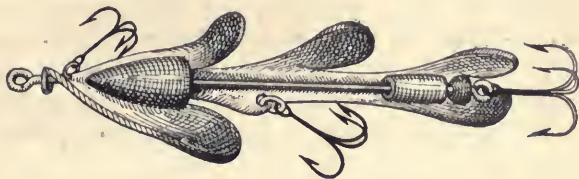


JARDINE'S "INTERCHANGEABLE TAIL" SPINNING BAIT.

appearance in the water, can be made of any weight, and no supplementary lead is needed on

the trace. On one of these reversible-tail baits, fishing a Dorsetshire river, I ran seventeen jack and pike, and landed sixteen of them.

There is yet another artificial bait I am now bringing out, which I have named the "Diamond



JARDINE'S "DIAMOND JUBILEE" SPINNING BAIT.

Jubilee Spinning Bait," and from repeated trials my brother "pikists" find it is a "rare killer," which is my own experience. It is convolute in shape, and made of metal, weighing from half an ounce upwards—according to the sizes adapted for trout and perch, or for salmon and large pike, or sea-fish. It has no swivel, nor is gimp used in the hook armatures—both of them elements of danger when the angler is playing a big fish. (See illustration.)

Among other artificial baits are the "Geen's Spiral" and the "Serpentanic"; the latter is in-



GEEN'S "SPIRAL."

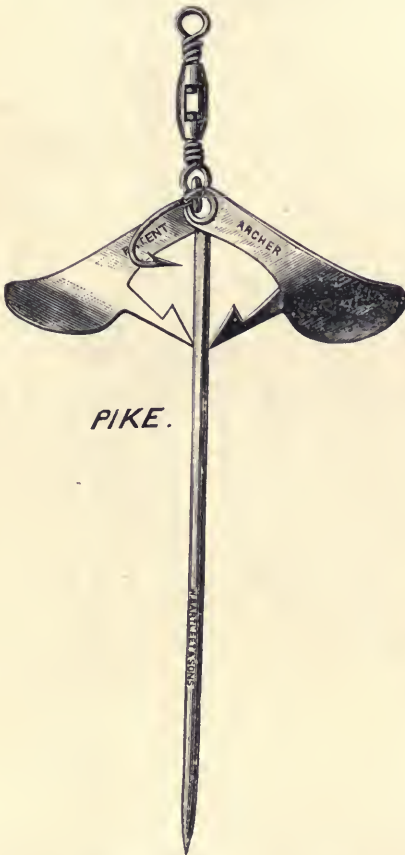
geniously constructed of coiled flexible wire, both of which, with the large variety of spoon-baits, such as the "Norwich," the "Colorado," "Canadian Tassel," "Bar-spoon," "Otter," "Comet,"

"Clipper," and "Lightning" spinner, are all of them fairly good substitutes for natural baits when the latter cannot be obtained. For two or three years I have been experimenting with, and trying to perfect, a phosphorescent spinning-bait, to be used in very deep waters, such as Irish loughs and weir-pools, or for sea-fishing at night. The difficulty is to find a phosphorescent liquid that is not explosive. I have partly succeeded in doing so ; but the various luminous paints do not answer at all.

If the tyro finds it difficult to put a natural bait on a flight, so that it will spin properly, he can use a "Chapman" spinner, on which a bait spins well ; but the disadvantage of this tackle is, that after being in action a short time, the tender interior of the bait with which you are spinning yields to the constant strain on the tiny hook, and there is a gradual withdrawal of the flanges from the mouth of the bait. In my own opinion the "Archer" spinner and the "Abbey Mills" spinner are very much better tackles for dead natural bait.

There is another bait-spinner known as Hardy's "Crocodile," which I have not used myself ; but it appears to be an excellent one, from which the bait cannot become detached, or pike which go for it escape being hooked. A capital spinner for dead baits is the "Coxon," patented by Allcock and Co. It is easily and quickly baited ; has a natural appearance when spinning, the rotary motion being given by curving the metal placed within the bait, which, owing to the arrangement of side hooks, cannot easily strip when drawn through weeds. The last artificials I shall mention are "Phantom-baits," made of silk, also of sole-skin, and not the

least valuable in my opinion as excellent lures, although the last to be named by me. Undoubtedly they are capital pike-baits, especially the "blue



"ARCHER" SPINNER
BAITED.

THE "ARCHER" TACKLE (PATENT).

phantoms," though rather expensive for pike-fishing. The late Francis Francis believed very much in

them for fishing Scotch rivers and lochs. Of course phantom-baits are made in many sizes for the capture of pike ; also salmon, trout and perch.

I mentioned Francis Francis in connection with



"SERPENTANIC" BAIT.



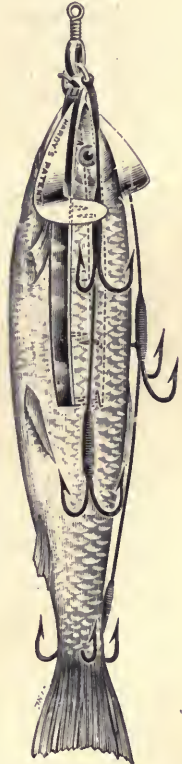
"ABBEVILLE MILLS" SPINNER.

these artificial baits. He was once, with the permission of the Earl of Breadalbane, fishing in Loch Tay, spinning for pike, and captured a fine salmon with his phantom-bait. The net-fishings had

closed. The earl was entertaining some guests, and the keepers who had tried with rod had failed in catching a salmon, and told Francis there would be no fish for dinner at Loch Tay Castle. So



HARDY'S "CROCODILE."



"CROCODILE," BAITED.

Francis, like a true angler, sent his salmon as a present to the Earl, who accepted it, and told his friends how thoughtful it was of Francis to have done so. At dinner an Irish clergyman who was

present, on being requested to say "grace," proceeded thus :—

"God bless Loch Tay, which I've heard say, the region of
romance is,
God bless the Earl of Breadalbane, and God bless Francis
Francis,
God bless the rod, the reel and line, also the phantom
spinner,
And bless the fish which left his Tay (*tea*) to come to our
dinner."

CHAPTER V.

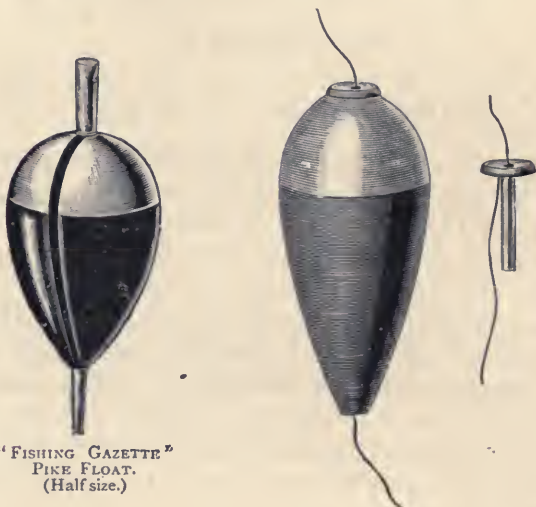
SNAP-FISHING—ROD, TACKLES, BAIT, ETC.

A PIKE-ANGLER intent on livebait snap-fishing should fit up his rod with the short top. I had a pike-rod constructed by Mr. J. R. Richardson, Kingston-on-Thames, of whole cane, that is well balanced and a powerful weapon. He also makes another with a cork grip, a most excellent weapon for livebait pike-fishing, and equally adapted for sea-fishing. Before passing the subject of pike-rods, I must mention the fine workmanship, strength, and reliability of the whole-cane pike-rods made by J. Gillett, of Fetter Lane.

A pike-angler's reel should contain a hundred yards of No. 2 plaited silk waterproofed line, the last forty yards of which it is well to rub with deer fat, or mutton fat, to make it float better. Some anglers advocate the use of two or three small perforated globular corks, called pilot-floats, which slide on the line and keep it afloat. I don't believe they are of much use, but, if anything, nuisances, and in the way. He will require a trace either of gimp or twisted gut, the latter being much the

best ; at or near the bottom of it is the lead ; he will also want a pike-float to keep the livebait suspended and swimming at the proper depth below the surface of the water ; and with snap-tackle—also dace or gudgeon in his bait-can—he will be equipped and ready for the fray.

First of all I will describe pike-floats, of which various kinds are sold in the tackle-shops. The

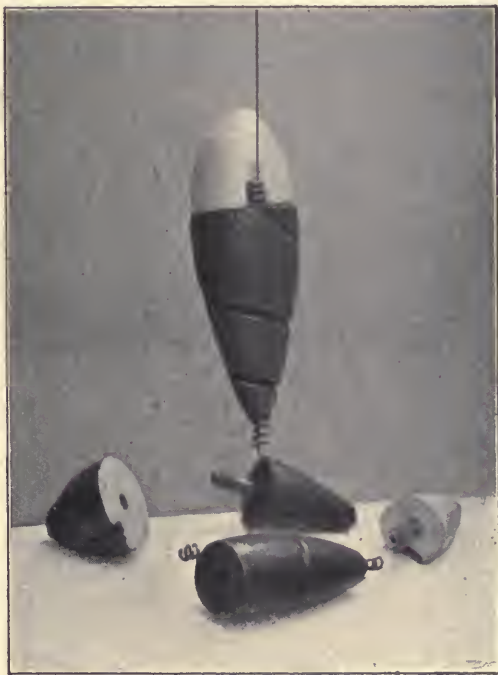


FARLOW'S NEW PIKE FLOAT.

Fishing Gazette float is a very useful one, made with a channel cut half through the side into which the line is placed, and the float fixed in position on the trace, by inserting a wooden plug.

Farlow and Co. recently showed me a new arrangement which is registered for fixing a pike-float to the trace ; it is very simple but quite effective and has no outstanding peg, to catch in weeds or submerged boughs.

One of the most recent inventions in pike-floats is the "Duplex," which has two interchangeable tops, one painted red, the other white. The red top is for use on bright days, and shows up well when a white top would scarcely show at all in the

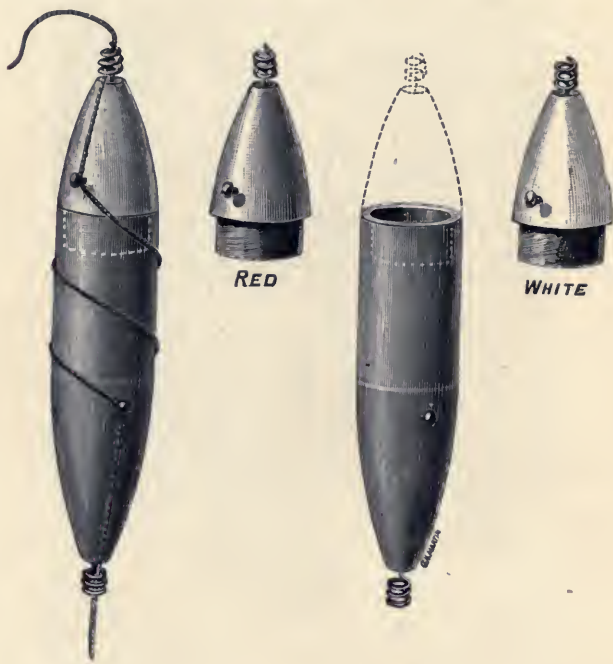


JARDINE "DUPLEX" CORK FLOAT.

glint of sunlight. The red top can be seen nicely in the foam-flecked waters of weirs, where white would not be visible. On dull days, cloudy weather, and under the shade of overhanging boughs, and as evening is coming on apace, then

the white top would be preferable to the red one.

Some of these floats are constructed entirely of cork, others of bamboo and cork, and both of them possess great buoyancy, without distressing the livebait. By a simple but effective con-



JARDINE'S "DUPLEX" BAMBOO FLOAT.

trivance without the aid of plugs or pegs, they can be fixed on any part of the trace or line, and quickly shifted higher or lower according to the depth of water; and the cork floats—which are bored through their entire length—can be used as

sliding or "traveller" floats to fish waters thirty or even fifty feet in depth. These floats are manufactured by Messrs. Allcock and Co., Redditch. I have taken the following extract from the *Fishing Gazette*:—"Last week a well-known contributor to the *Fishing Gazette* was using one of the new 'Jardine Duplex Pike-floats' in an old flooded stone-quarry, and successfully fishing by its means water 40 ft. deep." (See illustrations of the two kinds, bamboo and cork and all cork.)

Of leads, to place on the trace to ballast the float, various patterns are sold in the tackle-shops. Among the most useful for livebait fishing are those which are detachable, so that they can be placed on the trace near to, or if preferred, farther away from the bait. The leads which more than any others embody this advantage are the "Archer" Jardine leads (see p. 60), which are attached or detached by coiling or uncoiling the trace on or off the lead and wire (as shown in the illustration). They are made in various sizes and are in universal request. Another useful lead, which is a fixture on the end of the trace, but longer or shorter gimps to the snap-hooks may be used, is my "perfected barrel lead"; it has been for years a favourite lead with pike anglers. A brass wire, eyed at the top, runs through the lead. The bottom of it is formed like a flattened loop, into which the loop of the hook gimp is placed and the lead pushed down over the wire.

The next tackles (and important ones, too) to be considered are livebait snap-tackles. Anglers have their whims and fancies, some of them even now preferring the old and nearly obsolete "saddle-snaps," while others like the "Pennell" and some

the "Bickerdyke" snaps. Both are excellent tackles.

About 1882 I introduced new snap-tackles with which I had killed some of my largest pike.



PENNELL'S LIVEBAIT SNAP-TACKLE
(with adjustable Lip Hook).

Lately I have improved them, and now they are known as Jardine's "Perfected" snap-tackles. One alteration is in the small "ryder" hook being made rather longer, which is to be inserted in the *top corner* of the bait's gill cover, and *not* in the base of its pectoral fin, for just there is the fish's heart, and the bait soon gets exhausted and dies.

The bait lives much longer and works more strongly with the hook in the corner of the gill cover. Livebaits are often difficult to procure,



JARDINE'S "PERFECTED" SNAP-TACKLE
(with adjustable Hook).

especially in quantity sufficient for a couple or three days of pike-fishing, and it becomes necessary to economise, and not to exhaust or kill them when livebaiting.

To further this end, two years ago I invented a snap-tackle in which one hook only is placed in the bait's back-fin, which does not injure or weaken it, the other triangle being kept in position by a fine wire spring put in the bait's mouth and out through its gill cover. These new tackles are manufactured by Messrs. Allcock and Co., Red-ditch, and patented by them as the "Jardine Pectoral Spring Pike-Snaps."

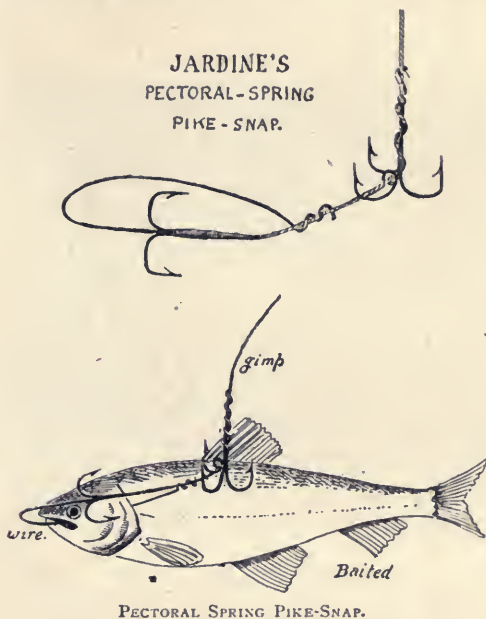


THE "PERFECTED" SNAP-TACKLE.
BAITED.

They are retailed by Messrs. Carter and Co., St. John Street Road, and most other dealers; and my own experience is that baits used on these tackles last three times longer and "work" much more strongly than on any other snap-hooks, and that these tackles excel most others in killing qualities.

I quite agree with Mr. C. Pennell that any hooking of the lips—and I would also add, in the

pectoral fins—of livebaits is to be avoided if possible; the former interferes with the respiratory functions, and both tend to shorten the existence and lessen the vitality of the bait. The hooks at the head of the bait should point backwards, and those at the dorsal fin upwards, for, as the pike seizes bait crosswise and then turns the head first



into its mouth, both the triangles thus arranged are almost certain to hook him ; in fact, I hardly ever failed to hook a pike on snap-tackle. It will be seen from the illustrations that the top or dorsal triangles of both my tackles are "sliding," i.e., adjustable to various sizes of baits, but they are made also with different sizes of hooks.

The trace should be about 3 ft. in length, and may have either a double spring-hook swivel, a buckle, or a loop swivel, whichever is preferred on the bottom end, on which to attach the snap-hooks, and if the leads are painted a dark-green or olive, they assimilate better to the colour of weeds, &c., and are not so easily seen by the fish. I have already described the kind of baits required, of which dace are undoubtedly the best for snap-fishing, and next to them large gudgeon and roach, 5 or 6 ins. long. For big pike an 8-in. barbel fished at mid-water is an excellent bait. A



Outer Can.



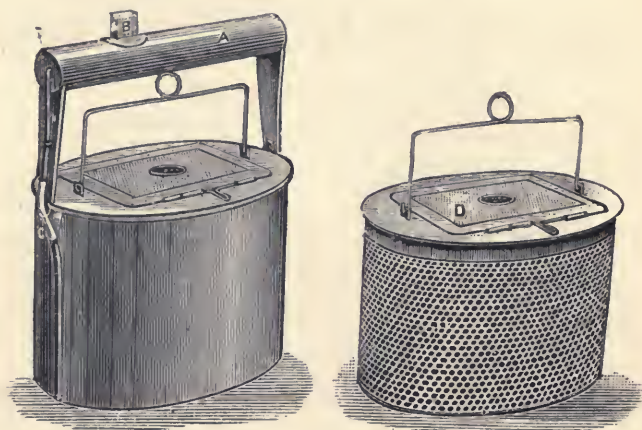
Inner Can (Perforated).

ZINC BAIT-CANS.

bait-can will be wanted by the angler in which to keep his dace alive. Most cans now have double lids to prevent the water splashing about. Those cans with an interior one of perforated zinc for lifting out are very convenient, as a bait may be selected without wetting the hands, a discomfort in frosty weather. The inner part of these cans may be withdrawn and placed with the baits in the river to freshen them up and keep them alive and active.

A few years ago Mr. Basil Field (a noted angler) invented his "double bait can," with an aerating

bellows within its handle, which, while being grasped in the act of carrying the can, allows the air to be pumped by alternating pressures of the thumb, from the bellows down a small tube into the water, thus completely re-oxygenating the water, and the baits. In these cans I have conveyed live baits very long distances, once over 120 miles, without a bait dying, all arriving fresh and vigorous at their destination.



Outer Can.

Inner Can.

FIELD'S AERATING BAIT-CAN.

These aerating cans are made in various sizes, and can be obtained at most of the London tackle-shops.

And now we will imagine the pike-angler is equipped, and eager for the fray, with his tackle case containing traces, flights, snaps, &c., in his wallet; gaff or landing net suspended at his side; a couple of dozen live dace in his bait can; a larger bag to hold his captures slung across his

back ; and booted to his knees ; so we will go with him to the river side, and commence live-baiting á deep sedge-fringed pool, where the stream makes a splendid eddy by a bed of rushes growing in the water, a rare place for a pike, and the home of a large one we know of.

Selecting a bright and lively dace and placing it carefully (so as not to injure it) on the snap-tackle, then adjusting the float so that the bait shall swim somewhat below mid-water, and pulling a dozen yards or so of line off the reel, we next draw the line down through the rod rings, and thus lift the bait up towards the top-joint. Then with a gentle and "accelerative" swing of the rod, we release the line, letting it slide through our fingers, and cast the bait quietly in at the top of the pool, paying out line when necessary, but holding the bait for a minute here and there, or drawing it to likely places. Thus we fish all the water, down to the centre of the eddy, when suddenly the float disappears under the surface but comes up again a few yards farther off ; then down it goes again, and we quickly gather up the short slack of line, and drive home the steel, when from the swirl in the water and impetuous plunge of the fish, we know that we have hooked a heavy pike.

Keeping as tight a rein as is possible, but giving or recovering line according as the fish dashes desperately here and there in its efforts to escape, and playing it *from the reel* in preference to having line lying loose on the ground, thus avoiding the possibility of its being trodden under foot or otherwise hung up and fouled, the fish is played and conquered, drawn to the landing-net and lifted ashore ; it proves to be a female, much

too pretty and plump to have her lovely body torn and disfigured by the gaff. By February pike have paired, and we know that her mate should be somewhere near: so we put on another dace and try the lower end of the pool, where the water is less deep, and are rewarded with a splendid run from a good fish, which when landed, proves to be the male, a handsome ten-pounder. Thus at the commencement of their honeymoon, we capture both bride and bridegroom, and put an end to their connubial joys. Why are most of the largest pike females? In the early part of the year when pike are paired, on catching a female fish, say of 16 lbs. or 18 lbs. and going for and capturing her mate, I have generally found him to be about a twelve-pounder. Is it because large lady pike prefer the attentions of young and active husbands, or is it rather that male pike seldom attain to the splendid development, and handsome proportions of the gentler sex? I never saw a really handsome male pike of heavy weight but once, and that was a grand specimen of 28 lbs. which came from Lord Normanton's fishery on the Avon. My 37 lbs. 36 lbs., and 31 lbs. pike were all females.

The haunts of pike are close to weeds, near beds of sedges or speargrass growing up through the water, where they lie in ambush, ready to dart out at any small fish which happens to swim by. These places, and the tails of islands, where the divided stream reunites and forms eddies; deep holes, and the vicinity of old weirs, the entrance to deep ditches and backwaters, are all likely localities in which anglers may calculate on catching pike. But after November, when frosts have despoiled the weeds and rushes, pike will be found in the

quiet streams and open waters. Livebait snap-fishing is a method much adopted by Thames anglers, and I know of many large pike caught in the Metropolitan river by that way of fishing. At Sonning-on-Thames, I have killed many from 12 lbs. upwards, and thrice exceeded the score pounds ; and there, as elsewhere, my best sport has been on windy days, which, as a rule, are favourable opportunities, for then pike roam away from their fastnesses in search of food, and lose their habitual caution. The ripples on the surface of the water refract the rays of light, and the angler and his punt are but indifferently seen, if at all, by his quarry. But under any circumstances of wind and weather, if fishing from the bank, it is always best to keep a little distance from the river at first, until the nearest water has been tried ; pike often lie close inshore, even when water is very shallow, provided there is a reedy or rush-grown margin, or the shelter of a bank or bushes. Approach very quietly, for the vibration of heavy footfalls on the margin of a river or lake is transferred to the water, and the fish are disturbed ; cast in your bait without splashing ; for quiet fishing frequently succeeds, while noise and commotion often result in a blank.

On September 4th, 1879, I fished a little lake of fifteen acres in Buckinghamshire. The weather was very stormy and tempestuous. My punt was rather small and shallow ; and the gale increasing, it was dangerous to keep out in the middle of the lake exposed to the full force of the wind. I therefore shifted to the leeward side of an island, where in ten feet of water I expected to find a monster pike, which some nine months previously had

smashed up the rod and tackle of a brother angler, who was then fishing with me. I baited with a half-pound dace and cast it into the open channel between some weeds, and waited but a short while before I had a run, and drove my snap-tackle well home. The pike immediately made a mad rush, taking nearly a hundred yards of line off my reel, and leaped some feet out of the water; this was several times repeated, but my salmon gut trace held firm. I had the pike well in hand, and in twenty minutes it was gaffed and safe in my punt. The fish measured 47 ins. in length, 25 ins. girth; and that afternoon, in the presence of Mr. W. H. Brougham, late Secretary of the Thames Angling Preservation Society, weighed 37 lbs. This pike was probably induced by the tempestuous weather to feed fearlessly, and thus lost its life. It and another of 36 lbs. (both set up in the same glass case) adorn my collection of specimen fish.

The relative temperature of the water and air has much to do with success when pike angling. As a rule the air should be a few degrees higher in temperature than the water, so that it is above freezing point. Even in severe frosts pike may be caught in rivers which flow too fast to freeze, but the line may become so completely enveloped with ice that it will not run through the rod-rings, when, if a fish of any size is hooked, a breakage is certain to occur. To remedy this the angler should envelope the bottom and top rings, and an intermediate one, with cotton wadding, secured in position with whippings of silk or thread, the wadding to be saturated with castor, or cod-liver oil, which lubri-

cates the line as it passes through the rings to and fro, and effectually prevents its freezing. Snow and frost do certainly play havoc with fishing ; but I have on some occasions had excellent sport in the keenest weather, when the days were bright and with a little wind blowing.

Some winters ago, I fished the Frome with the late Mr. J. P. Wheeldon, when the quieter parts of the river and its backwaters were frozen over, but in the main channel thick slabs of ice were hurrying along the swift-flowing current towards Pool Harbour. We fished close up to the land-locked ice, and our floats would again and again disappear under the edge of it, as hungered into madness, some plunging pike seized our livebaits, perhaps to rush out among the ice-floes, when it required all our skill to play and secure the fish. At other times, our lines would be severed by the sharp edges of the ice, and the fish escaped ; but we had grand sport, and killed many big fish in spite of the bitter weather. My friend graphically described our experience in *The Sportsman* of January 10th, 1894.

“In a far-off western county, as Jardine and I conned over each day’s fishing, Death stalked rampant with such mercilessly cruel grip in his strong bony hands and throttling fingers as choked and crushed the warm breath of life from man’s weak frame, as also in countless numbers and instances from the hardier birds and wild animals which could not live and exist with no better shelter than the open woods and bleak fields could supply.

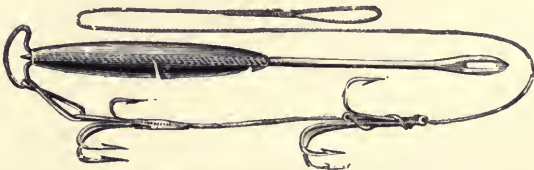
“Two tramps were found locked together in one another’s arms for warmth, yet frozen to death in

the cruel snow. Rabbits and partridges were stumbled upon, stiff and hard under the leaves and tussocks of dead grass. Birds in great numbers dropped dead from their roosting places in the trees, while living creatures were so utterly worn out and starved from the effects of relentless cold and want of food, that I positively caught starlings with my hands, too weak to fly away from bushes by the roadside; and almost set my clutch upon live rabbits, who only just managed to scuttle away from dry nooks under sheltered thorn bushes across the depths of frost-crisped snow-drifts, too deep to follow them without plunging in up to one's middle. The very men who rowed our boats each day (and we had each morning to break it out from thick ice, the result of a single night's frost) fairly shirked their job; and yet they were hardy shore-fishermen and deep-sea dredgers, accustomed to bear the brunt of the very worst wintry weather howling round the neighbouring coast. Said one of them to me as he was loosing the ice round the boat one bitterly cold morning, 'I wonders how you soft-'anded Lunnon folks stands it.' I wondered too; and yet we did, day after day, in the teeth of such iron-like frosts and blinding snow-storms as I would not again face,—no—not for a whole boat-load of twenty-pounders. Jardine put me up to a little dodge, and a very good one it is in frosty weather, of wrapping thick pledgets of cotton-wool, thoroughly saturated with castor-oil, round the inner and outer sides of the rings of the rod, fastening them in their places with whippings of fine thread. This certainly held the frost in check, and enabled us to fish fairly comfortably, although every now and then the line got abso-

lutely clogged with big beads of ice, which prevented it running freely through the rings. Beyond that we suffered little or no unpleasantness, for the sport being simply magnificent and the fish feeding very quickly, that alone kept us at fever-heat ; and I think that on the whole we stood the cold even a shade better than either of the boatmen did.

“ It was certainly terrible hard work for them ; for the oars, from the broad blades right away up to the very handles, were a solid mass of ice as thick as a man’s thigh ; and this extra weight alone, combined with constantly holding the heavy lumbering craft steady, in the set of a strong stream, as first one and then the other angler was busily employed in steering a powerful fish from dangerous quarters under great drifts and floes of floating ice, made an occasional stoppage for the sake of warming a pannikin of strong coffee over a spirit-lamp, and adding thereto a good ‘ swig ’ of old brandy, an uncommonly welcome relief to the crew all round.”

There is another way of fishing for pike, viz., with deadbait snap-tackle, for which Mr. R. B.



MARSTON'S DEADBAIT SNAP-TACKLE.

Marston has invented a special tackle ; it is patented by Hardy, of Alnwick. It is used with a sink-and-draw motion in deep water.

To bait this tackle screw out the needle until the

end of lead to the needle eye measures the same length as the bait from tip of nose to centre of tail. Insert the needle in the mouth of bait, and push it with the lead quite through, being careful to keep in the centre until the eye protrudes from the tail sufficiently to admit loop of gimp passing through it; then turn up the hooks, fixing one of the first triangles in the gill-cover, then fix one of the next set midway between tail and the first set, and complete by making a half-hitch round the root of tail with the gimp, and pass loop through the needle eye. Or the hooks may be detached from the lead and used as a livebait snap. It can also be used for spinning by threading the gimp in at the side, above but rather behind the vent and out at the mouth, by the aid of the needle; then thread through the centre of lead which is pushed into the bait, the triangle of hooks being drawn up tightly, to give the necessary curve to make the bait spin: at the same time make a half-hitch round the wire eye of the lead, and pass through the lips of the bait by puncturing them with the needle.

Pike-anglers who are acquainted with these tackles speak well of them.

CHAPTER VI.

LIVE- AND DEAD-BAIT GORGE-FISHING.

THE use of live- or dead-bait on gorge-tackle is never practised by true anglers who fish in a sportsmanlike manner. A great objection is its cruelty, for the pike swallows the bait and is usually hooked in the stomach, and in its efforts to escape the intestines are either torn or dragged up, causing such extreme pain that the fish can give no sport to the angler, but is in fact hauled out like a log of wood. Small fish are so injured that if returned to the water they are sure to die ; but snap-fishing is humane and sportsmanlike, because the fish are always hooked in the mouth by this method ; they suffer no pain, and only fight against the restraint of their tether ; moreover, small jack can be carefully unhooked and replaced uninjured in the water, which may also be said of spinning and paternoster-fishing. But should pike have established themselves in valuable trout or grayling rivers, from whence it is desirable to exterminate them by any and every means, and they are looked upon as no better than vermin, then and there, perhaps, gorge-fishing is allowable.

This volume, therefore, would be incomplete without a description of the *modus operandi* of trolling, which, in fact, is fishing with a dead gorge-bait.

In 1662 Nobbes, the "Father of Trollers," published his *Complete Troller*, in which he disseminated sounder views and some improvements on the methods previously practised in this department of pike-fishing.

Since Nobbes' time great advances have been made in the art of angling; the old-fashioned tackles of our forefathers have been displaced by more perfect ones of modern construction; and for those who care to fish for jack and pike—before the weeds are down—a day's trolling is possibly (where it is allowed) amusing. As the angler strolls along the banks of some weedy water, he may (as J. J. Manley suggests in his *Fish and Fishing*) flatter himself "that, etymologically, 'trolling' and 'strolling' have one and the same meaning, as indeed some etymologists aver," making it out to be "fishing as you stroll." Besides the great objection to gorge-fishing (with either a live- or dead-bait), that it involves almost every fish taken, large or small, being killed, there is the great loss of time incurred by waiting for the fish to "pouch" the bait; and then, after a delay of eight or ten minutes to give them time to do so, there is the constant disappointment of finding the jack has rejected, or only been playing with, the bait, or that no jack took it at all, or, maybe, the bait had hung up in a weed. The advice of the old gentleman (in *Punch*) to the youthful angler at his side who was gorge-fishing, was "Never hurry a jack, Tom." The picture

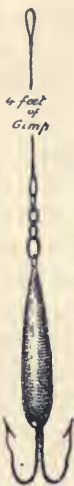
showed the hook of the bait fast in a log of wood at the bottom of the river. Of course a pike angler ought to, and generally does, know when a fish has struck, also when *he* has struck a weed, or some other subaqueous impediment; and if there is any doubt as to which, he can usually tell by a tentative tightening of the line whether a fish has, or has not, taken his bait; but not to every angler is given that sensitive faculty.

However, should there be any uncertainty, a few slight pulls on the line will elicit the fact whether a fish is at the end of it; if there are unmistakable signs of its presence, and the fish moves but slowly about, shaking the line now and again it is probable the pike is carrying the bait cross-wise in its mouth, and has not turned it head-first preparatory to swallowing it. Under these circumstances a slight jerk will usually induce the pike to bolt the bait without further hesitation, when most likely it will move off at once to its haunt; then the line may be reeled up and the gorge-hooks driven home, by giving a smart firm draw (not jerk) with the rod, and the fish be then played to the landing net or the gaff.

When an angler is trolling, his bait roves about in rolling gyrations, which is what it should do, to attract the pike, who no doubt mistakes it for a wounded fish swimming with difficulty. To add to these circular motions, some pike trollers before placing the bait on the gorge-tackle cut off one of the pectoral fins and the opposite ventral; the tail fin should be neatly cut off close up to the flesh.

Among the most modern gorge-bait tackles is that recommended by Mr. C. Pennell, (see illustra-

tion below). It consists of two hooks, rather rank in the bends, having long shanks that are brazed together, and terminating in an eye, with lead moulded on to the shanks to weight the tackle. The trace, either of gimp or of twisted gut, with the last nine or ten inches of gimp, should be four feet long, having at its end a small buckle-swivel, or a swivel with a turned-down hook, which is placed in the eye of the gorge-tackle.



PENNELL'S GORGE-
BAIT TACKLE.

The loop at the top of the ten inches of gimp is attached to a baiting needle; the needle is passed in at the bait's mouth and brought out exactly in the middle of the roots of its tail, which has been previously cut neatly off. Then draw the gimp through the bait and push the lead into its body, leaving the hooks lying one on each side of the bait's mouth. Pull the gimp tight, puncture the flesh by the tail from side to side, draw the gimp through the hole with the baiting needle; and in the loop thus made pass the end of the gimp, draw tight, and the half-knot thus formed will not slip, but can be instantly undone, when it is necessary to put on another bait. These tackles are much better than the older kind, which have the lead too far down towards the bends of the hooks, and bulge the cheeks and gill-covers of the bait, especially if it is a gudgeon, so that weeds may catch and tear them; also the long stiff twisted-wire shanks are objectionable, as they make the bait too

rigid ; and frequently, when the bait has been seized, it is immediately rejected, because the pike has felt, or, maybe, has bitten the stiff wire. Only the lead should be in the belly of the bait, the remainder of the tail being flexible, which also assists the rolling gyrations of the lure as it is alternately dropped and lifted, in and out, between the weeds. To entirely do away with the rigidity of solid lead on the hook-shanks of gorge-tackles, I recommend them to be made thus. Procure ordinary *live-bait* gorge hooks and bind them to twelve inches of platinum gimp, on which thread perforated shots graduated in size, as shown in sketch annexed ; then whip a loop at the end of the gimp and the tackle is complete. Bait the same way as with the tackle previously described ; there should be a swivel between the hook-gimp and the trace ; a second swivel is not absolutely necessary, but a buckle-swivel, or hook-swivel if preferred, may be put on the end of the line, to which the loop of the trace can be attached.



SHOTTED GORGE
HOOK.

The spinning rod, reel, and line, are quite adapted for trolling with gorge. When trolling it is best to fish up stream, and to work the bait down with the current through the weeds. If the contrary way is attempted it will result in many a hang-up in the weeds ; besides, there is this advantage in fishing up and bringing the bait down with the stream : it approaches the pike more naturally,

and is better seen by them, as (except in gentle currents) they always lie, whether in ambush or not, with their heads up stream, on the look-out for small fish swimming past. It is not necessary to make long casts; in fact, it is better not to do so, for the bait being lifted and dropped almost perpendicularly in the openings between weeds, trolls, or gyrates in a much more tempting way than when drawn slantwise through the water; and as the pike are usually among the weeds or in deep weedy holes, from whence they cannot readily see the angler, it is better to carefully fish all the nearest water than to make long shots with the bait. Raise the bait to the surface every two or three seconds and let it sink head foremost, giving a foot or so of slack line, and then it will have a darting rolling movement as it drops to the bottom. Keep continuing this, and if a check is felt, slacken the line by paying off a few yards from the reel (if none is already unwound), and see that all is clear for a run, in case a fish has taken the bait, which will soon be known by the fish moving off, or by a few fierce little drags at the line; then allow the few minutes that are usually given the fish to pouch, wind up the slack line, give a firm draw with the rod, and play the fish on and off the reel, in preference to dropping the line in coils on the ground.

Not unfrequently a pike takes a bait so near to his lair that there is little or no moving off with it; the fish simply remains where he is and pouches at his leisure; the only plan, then, is to gradually tighten up the line, when, as old Nobbes says, "a gentle 'stroak' will do him no harm"; and to quote the same authority, "when a pike moves

up stream after being hooked, it is a sign of a large fish."

In Mr. Stoddart's *Angler's Companion* is the following graphic description of a pike taking the gorge-bait, and it is so much to the point that I have copied it for the benefit of those of my readers whose misfortune it is not to have the book I have mentioned.

"None that ever felt the first attack of a pike at the gorge-bait can easily forget it. It is not, as might be supposed from this character of the fish, a bold, eager, voracious grasp: quite the contrary; it is a slow calculating grip. There is usually nothing about it dashing or at all violent; no stirring of the fins, no lashing of the tail, no expressed fury or revenge. The whole is mouthwork, calm, deliberate, bone-crushing, deadly mouthwork. You think at the moment you hear the action—the clanging action—of the fish's jaw-bones; and such jaw-bones, so powerful, so terrific: you think you hear the compressing, the racking of the victim betwixt them. The sensation is pleasurable to the angler as an avenger. Who among our 'gentle craft' ever pitied a pike? I can fancy one lamenting over a salmon, or the star-stoled trout or the playful minnow; nay, I have heard of those who, being bereft of a gold fish, actually wept: but a pike! itself unpitied, unsparing, who would pity? who spare?"

"I no sooner felt the well-known intimation than drawing out line from my reel and slightly slackening what had already passed the top ring of my rod, I stood prepared for further movements on the part of the fish. After a short time he sailed slowly about, confining his excursions to within a

yard or two of the spot where he had originally seized the bait.

“It was evident, as I knew from experience, that he still held the bait crosswise betwixt his jaws, and had not yet pouched or bolted it. To induce him, however, to do so without delay, I very slightly, as is my wont, tightened, or rather jerked the line towards myself, in order to create the notion that his prey was making resistance and might escape from his grasp. A moment’s halt indicated that he had taken the bait; and immediately afterwards, all being disposed of at one gulp, out he rushed, vigorous as any salmon, exhausting in one splendid run nearly the whole contents of my reel, and ending his exertions with a desperate somersault, which revealed him to my view in all his size, vigour, and ferocity: the jaws grimly expanded, the fins erect, and the whole body in a state of uncontrollable excitement.”

It is my own experience, however, that a large pike will sometimes take the bait with such a ferocious rush as well nigh tears the rod out of the troller’s grasp: notably once on the Loddon, close to some sedges—where had been a bed of water-lilies—then cut down by winter frosts, a big fish seized my gorge-bait, one of the few times I ever fished that way, bolted it at once, and rushed fifty yards with it. The pike just topped 19 lbs.

Fishing with the live-gorge bait does not require much piscatorial skill. A double-hook bound on to twelve inches of stained gimp, a leaded trace, and a float are all the tackle required: a reel, line and rod, similar to those used for snap-fishing will be found quite suitable. The same objection applies to this as to fishing with dead-gorge bait,

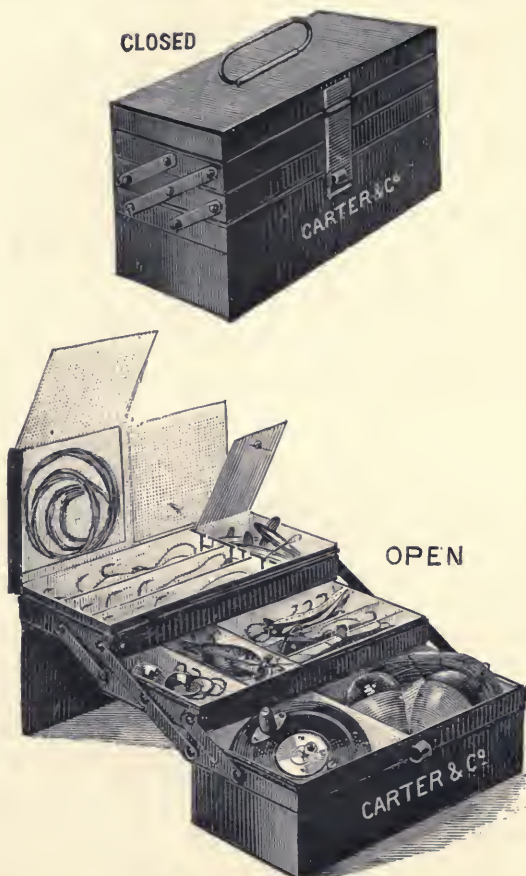
viz., that the hooks being swallowed, it is nearly impossible to extract them without killing the jack, be they small or large fish. To bait the hooks attach the loop in the gimp to a baiting needle. Let the dace or roach lie flat on your left hand with its head towards your wrist, the fingers and thumb holding the bait, but not squeezing and injuring it. Then insert the point of the baiting needle in the shoulder of the bait, pass it just under the skin and bring it out behind the back fin; draw the gimp carefully through so that the shank of the hook is hidden under the skin, and attach the gimp to the swivel on the trace; adjust the float to a proper depth for the water about to be fished, and cast your bait to a likely spot, where let it remain for some minutes to rove about. (See illustration annexed.)

If no run ensues, draw your bait to another place, but do not lift it out of the water oftener than necessary, which would weaken it. A run is known by the float disappearing under water, when pay out line so as not to check the fish that has taken your bait, but allow five minutes for pouching it; then wind up slack line, strike and play your pike, and land it as soon as possible. Among the most necessary and convenient things for the pike-angler to possess is a japanned case to contain his various tackles, such as artificial spinning-baits, livebait-snaps, traces, spare triangles, leads, &c.



LIVEBAIT GORGE
TACKLE.

My own japanned case, made twenty years ago, has well answered its purpose, but is now superseded by improved ones. A recent and greatly



EXPANDING TACKLE CASE.

superior "expanding" tackle-case (which is stocked by Carter and Co.) is a veritable *multum in parvo* ;

and in addition to its many compartments for the stowage of floats, hooks, spinning-baits, flights, &c., has receptacles for reels and lines. There is a hasp for a secret padlock, and a handle to carry it by on the lid or false back, which falls down and supports the case when opened, as is shown in the very accurate illustrations. A waterproof bag with a sling is also made, in which to pack the case when closed. Baskets and bags to hold the captured fish are very necessary addenda, and are also useful to contain the angler's wading boots and macintosh when journeying to a river or fishery. Convenient carriers of any capacity can be obtained at most tackle-shops. The next requisite .



(About one-third size.)

I must mention are gaffs. Of these some are made with the last inch or so of the point turning somewhat outwards. and not parallel with the shank ; these are faulty in shape. When properly constructed and mechanically correct, they should be as depicted in my sketch. The staff to which they are screwed should be about four feet long, and if of bamboo, it will carry a spare top-joint. There are various gaff staves sold ; some of them have folding hinges ; others are telescopic, but all are more or less convenient, and on the whole more so than landing-nets.

Steady nerves are required to gaff a big pike properly. On several occasions I have nearly lost a fine fish through the nervousness of an angling companion, who has through an erratic stroke nearly broken my line instead of gaffing the fish, and would have succeeded in doing so had I not dropped my rod point, slackened the line, and played the fish another minute or two before bringing it again to the gaff. I much prefer to gaff fish myself, and my invariable practice is to pull the gaff-point in, at, or between the under jaw-bones; then the hold is certain, and it never disfigures a fish, an important thing if the pike is large enough for a specimen.

I have seen some anglers gaff just wherever they could, sometimes through the cheek or in the back,



TELESCOPIC-GAFF.

and worst of all in the belly, ripping it all across and completely disfiguring and spoiling the fish. A pike should be quite played out and well in hand before it is drawn within gaffing distance; and when it is, then the gaffer should not hesitate. but make his stroke with certainty, and draw, not lift, the fish ashore.

Mr. Pennell advocates behind the shoulder as the best place to gaff a pike. It is a safe place, no doubt; but the flesh is apt to be torn if the pike writhes and struggles, which it usually does. As already stated, my favourite position is in the under

jaw between the jaw-bones, and then to draw the fish ashore head first ; but if any lifting is required, I place my thumb and middle finger of my left hand in the fish's eyes, and grasp the iron of the gaff with my right, and lift the fish ashore or into my punt. Landing nets are useful for fish under 8 or 10 lbs. ; the net should be capacious and deep, the ring large. My own pike net has a folding ring of steel, 20 ins. in diameter. Large nets are not necessarily cumbrous, but to prevent them holding water and hooks sticking in the meshes, the nets should be of oiled silk or flax cord, dressed in a waterproofing varnish, and the handle 5 or 6 feet long, so as to reach over the sedges and rushes which usually margin the banks of a river. When by myself, with no one to carry my *impedimenta*, I use no net, but only a gaff slung over my left shoulder, where it is handy but out of the way, while I am fishing alongside a river.

Most useful additions to a pike-angler's comfort (inasmuch as excoriated and bitten fingers are avoided, and much time is saved in extracting hooks from a fish's mouth) are pike-gags. A few years ago I invented and patented one which answers its purpose completely, and has been well spoken of by those anglers who have used them in rivers and the sea.

The knob D is for killing the fish by knocking it on the head. The prongs E, F (which should be previously closed) are then inserted in the pike or salmon's mouth ; B or D is held by the left hand, and the handle A turned round, when the prong F is drawn down the spiral rod C C, and the mouth of the fish distended to any width required, so that the hooks or salmon fly can be extracted

without injury to tackle or fingers. By the use of this gag, unsizeable pike can be returned alive and uninjured to the water. These gags will prolong the life of many an expensive salmon fly.

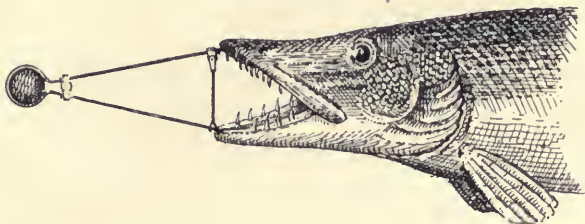


Since patenting the above I have invented a less expensive, and simple but powerful pike-gag. It is made of strong steel wire ending in prongs, which are placed in the pike's jaws, and expanded by drawing down the brass slide when the jointed arm, or crosspiece, can be fixed in position ; it is



then impossible the pike can close its jaws. In the coil of the wire is a knob of lead, with which to stun the pike, preparatory to extracting the spinning-flight, or snap-tackle, &c.

A disgorger is useful as an addition to the pike-gag, wherewith to extract the tackle from the fish's

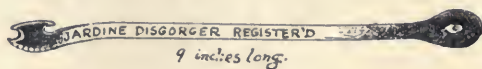


mouth. The kind represented on the following page is made of metal, has a prong and hook, a



sharp edge for cutting, and the knob at the end is for "felling" the fish.

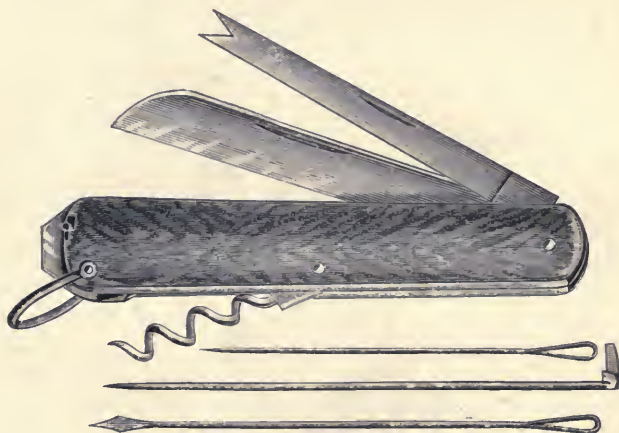
A very handy knife for fishermen, containing a disgorger, baiting needle, &c, also a corkscrew, which is an implement useful at times to pike-



JARDINE DISGORGER (Registered).

anglers, is sold by Farlow and Co., and is shown half size below.

Reference has been made to the merits of a bulb-pump for aerating the water containing live bait. With the bulb shown on opposite page I have conveyed ten and twelve dozen baits (placed in two

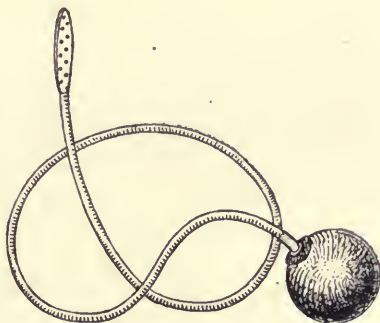


FISHERMEN'S KNIFE.

cans) very long journeys all alive and vigorous at their destination; then, placing the interior can with the baits in the river, to find them in splendid condition next morning for the day or two's pike fishing.

The bulb is a hollow india-rubber ball, with an air valve inside; three feet of flexible tubing is attached, having at its end a perforated nozzle of metal; this is dropped in the bait can; the bulb is held in the hand, and compressed by frequent squeezes of the fingers, which thus pumps air through the tube into the water.

When it is not possible to obtain live fish, frogs may be used as substitutes. The gimp of a double gorge-hook for live-baiting should be attached to the baiting-needle, the point of it



pushed tenderly under the skin just behind the frog's head and along its back without wounding the flesh, and out near the thighs, to one of which it may be fastened by a whipping of fine thread or silk. A couple of swan shots or a very light lead should be used on the trace.

The frog being cast into the water a little distance off, it will most probably swim for the opposite bank, when line must be paid out; but by gently drawing the line, the frog can be guided into and over the likeliest places to hold pike; and if

any are harbouring near, the lure will most probably be taken, and bolted head first.

Gold fish may be used as a *dernier ressort* in a total absence of dace, roach and gudgeon ; but they are sluggish fish, like all the carp family, and do not work well on snap or livebait gorge tackles ; under some circumstances, however, I have known pike to take them eagerly, possibly tempted by the change of diet.

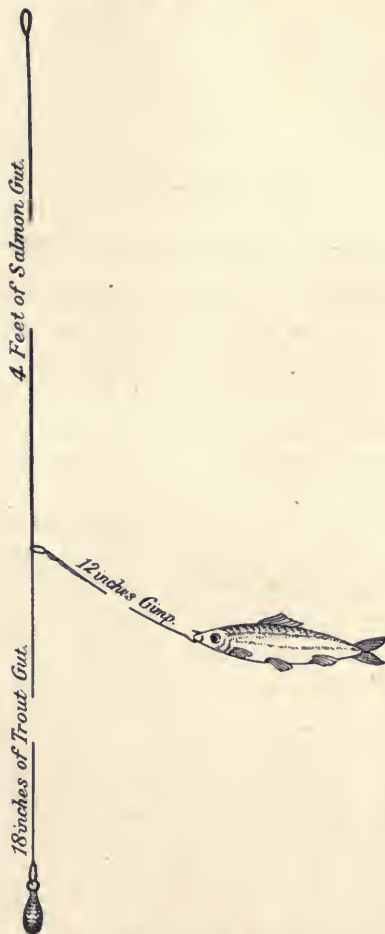
Pike have been caught with young ducks, moorhens, dabchicks and water rats inside them ; in fact there seems to be no limit to the voracity of a pike. The late Mr. Frank Buckland, in his *British Fishes*, page 161, mentions an imitation rat-bait, made from the end of a calf's tail, as an excellent lure, which his friend Colonel Martyn used with considerable success in the extensive reservoir at Ruislip, near Uxbridge. The following is his recipe :—
“Procure the tip of the tail of a brown calf ; make a head with a champagne cork ; stick two boot buttons into it for eyes ; attach a piece of leather bootlace for a tail ; and dress with triangle hooks. Big lake pike (who are very artful fellows) will not be up to this calf's tail bait—they will take it for a swimming water-rat ; and the chances are they will snap at it, especially on a windy day.”

CHAPTER VII.

PATERNOSTERS AND TRIMMERS.

ANOTHER branch of livebait-fishing is with paternoster tackle. There are conflicting opinions as to the meaning of the word "paternoster" as applied to angling; the origin of it is obscure, but in practice the mode is deadly; and from the manner in which the lure is manipulated, it approaches more nearly to spinning than any other method. But although spinning may be considered the most artistic way to fish for pike, yet I have frequently found paternostering the most successful, especially in the capturing of much the larger fish. This may be because large pike (by which I mean twenty pounders) are often sluggish, and while making up their minds about going for a spinning bait, it has passed them, or younger and more active fish have darted through the intervening water and seized the lure, thus anticipating the older *esox*. My own experience has taught me that pike under 8 or 10 lbs. are, as a rule, caught by spinning. I saw the late Mr. Francis Francis catch one of 18 lbs. at Sir Henry Mildmay's, Bart. Dogmersfield Lake, on spinning-tackle; but on paternoster I have considerably exceeded that weight; and once, fishing by that method, near

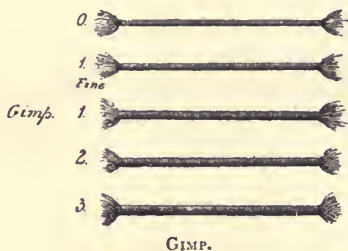
Glynde, Sussex, 23rd February, 1882, I captured and landed a pike of 30½ lbs.



PIKE PATERNOSTER TACKLE.

My favourite paternoster rods are from 12 feet to 13 feet long, built of whole-cane and stiff but

springy ; they do equally well for spinning. The rings are quite half an inch in diameter, and "guard" or "bridge" rings ; any accidental tangle passes easily through them without checking a fish I may be playing. To the end of my running-line is attached by the usual double-hitch and loop four feet of salmon gut stained olive-green, to which is looped 18 inches, or 24 inches of *trout* gut, if the water is deep, or has a bottom growth of weeds ; and at the end of all is placed a $\frac{1}{2}$ -oz. or $\frac{3}{4}$ -oz. lead plummet or sinker. The reason for adding the trout gut is this : should you get hitched up to a weed, or to



any obstruction, it is the first to break, being the weakest, and you only lose the plummet.

At the loop connecting the salmon and trout gut attach the paternoster hook, a square-bend No. 10 short shank, bound on 12 inches of No. 0 or No. 1 gimp of platinum wire ; any bright metal like brass or white metal glitters, and is therefore objectionable.

The bait should be a live dace $4\frac{1}{2}$ inches or 5 inches long, and failing that, a small roach or a large gudgeon, hooked through both lips, the bottom one first ; they live longer this way than when

hooked through the upper lip only, and can breathe very well on a *square-bend* hook. Draw six or eight yards of line off from the reel, cast the bait with a gentle swing into the water, and fish all the nearest water first, gathering the line up slowly with the fingers and thumb on to the palm of the left hand in figure-of-eight coils, a knack easily acquired with practice, slightly lifting and dropping the point of the rod, continually gathering in the line as described and keeping it moderately taut, thus searching all the water, insinuating the bait into eddies between weeds, and likely corners, and places usually frequented by pike. Each time the bait is withdrawn from the water (which should not be so often as to kill it) the length of the cast may be increased ; but a taut line should be kept and every bit of water searched by lifting the rod top slightly and drawing in a yard or two of line ; then, by dropping the rod point, the plummet finds the bottom, and the bait pirouettes round about.

Thus quietly moving and fishing fresh places (and close to weeds, if any), where the bait should remain a few seconds, if a pike is near, the bait is almost sure to be taken, which will be apparent by its being arrested and probably shaken, when a yard or two of line should be paid out, and three or four seconds allowed for the pike to turn the bait head-first into its mouth, and then a firm draw given (rather than a strike) by smartly elevating the point of the rod ; or if the pike runs with the bait, draw the rod the contrary way to the direction the fish is taking, and the chances are it will be securely hooked, most probably in the angle of the upper and lower jaw, where the hook is not likely to break away.

If in its first rush the pike takes all the line out of your hand, you will have it on your reel ; and it is well in playing a fish to get the line as quickly as possible on the reel, as it prevents the chance of getting the line fouled, or kinked, or in a tangle. Sometimes pike are in a capricious mood, and carry the bait crosswise in their mouths, not turning it. In clear water I have often seen them do this ; in such cases I have placed the paternoster hook through the bait's back fin, and when it has been seized, struck instantly, invariably hooking the pike. In summer and autumn they secrete themselves under and between weeds ; the paternoster is then particularly useful for fishing such places ; but not more than one hook should be used on the trace, as a second one might get fouled and cause a breakage in the tackle. Better sport is, as a rule obtained by paternostering than by other methods of angling, for the hook is usually imbedded in the upper jaw or else in the angle of the mouth, thus giving little or no pain, the pike fighting against the restraint of the rod and line, when the powerful efforts made by an eight or ten pounds fish are something to be remembered. A fish under 3 lbs. carefully unhook and return uninjured to the water ; and as paternostering, spinning and live-bait snap-fishing are sportsmanlike methods, prefer them to live-gorge and dead-bait trolling. If a good-sized fish is hooked, played, and escapes, try immediately with a very small bait ; this often succeeds, and tempts the fish to feed again. On page 126 is mentioned a 30½ lb. fish I captured near Glynde. I hooked it with a large roach on snap-tackle, and lost both pike and bait. I immediately changed to paternoster, put on a 4-inch dace, to which the

fish fed at once, and was successfully played and landed. It was a female, and measured 44 inches in length by 24 girth; and for condition, with elegance of contour, was one of the handsomest ever seen.

On January 30th, 1878, Mr. James Barker caught a $27\frac{1}{2}$ lbs. pike on paternoster-tackle in the Thames at Hampton Deep.

There is no practical limit to the depth of water that can be fished by paternostering, for the plummet of course carries the bait down to the bottom. It is a particularly good way to fish weir-pools, old flood-gates and camp-sheathings; and I should think would prove a killing method in the great depths of Irish loughs. At Shiplake Deep near Wargrave, where there are fifteen feet of water; at Runsford near Moulsoford; at Sonning (above the weir) and other deep waters of the Thames where are big pike, I have found paternostering successful: for the bait goes right down among the aldermanic fish. At Sonning some years ago, fishing with a nine-inch barbel, deep down to the bottom, I caught a fine pike of $21\frac{1}{2}$ lbs; and no doubt there are many as big or even bigger in these profundities of the Thames and other rivers.

Before leaving the subject of paternostering and live-baiting generally, I should say that the best time to fish is when a river has cleared, or nearly so, after floods succeeding frosts: the latter will have decayed the weeds, which the floods will clear away. In such conditions of water I have hardly ever known sport to be bad, especially if rivers are flowing in full volume, in which case the angler should fish the still eddies and quiet lay-

byes, near "reed-flams," the entrance to wide dykes and backwaters, where the shoals of dace and roach congregate to rest themselves from the stress of the rapid streams of the main channel: for there pike are sure to gather together, so as to be near to their commissariats. In frosty weather dace and roach seek the deeps, and thereabouts will be the pike; so the angler should swim his bait not more than a couple or three feet (according to the depth of water) off the bottom. Let him keep his bait moving, *i.e.*, searching the water: for if quiescent some time in the same spot, most probably his bait has hung up to a weed, or some other obstruction: if so, examine it and remove any bits of weed that may be adhering to the hooks; for no pike will feed to a fouled bait. But in autumn, before severe frosts have set in, and while the beds of rivers are still carpeted with luxuriant growths of weeds, in which pike often secrete themselves, it is necessary when paternostering to place the live bait as much as 2 ft. or even 3 ft. up the trace, so that it may be above the weeds, and within the vision of any fish harbouring near: for the angler's chances are considerably lessened if the bait being too near the plummet is drawn down into the weeds and hidden from the pike. Also when fishing deeps twenty or more yards away from you, it is advantageous to have the bait some distance above the plummet, because the oblique angle of the line would let the bait be too near to, if not actually in the weeds: but these details can be left to the discretion of the angler. Another way to angle for pike somewhat akin to paternoster-fishing is with a leger: it is not often attempted unless the water is in flood, and

so discoloured that a spinning-bait or snap-bait would not be seen : but the leger-bait drops right amongst the pike—if any are in the eddy.

The rod should be stiff, so affix the short top, for legering is heavy work. The reel may contain sixty or eighty yards of No. 3 line ; to the line fix the leger-trace, which consists of three feet of gimp or twisted gut, on which a perforated flattened bullet of one ounce is placed ; at the end of the trace is a swanshot and swivel ; to the latter eighteen inches of stout salmon gut is looped ; to this is attached the snap, or single hook, whichever is preferred, baited in the same way as described for paternoster-fishing ; or a pectoral-spring paternoster-tackle may be used, the bait (for either kind of fishing) should be four or five inches long. In floods, dace and roach frequent eddies, to rest from the stress of stream, and to find the food which is washed into and deposited in slack water by the currents, and to such places

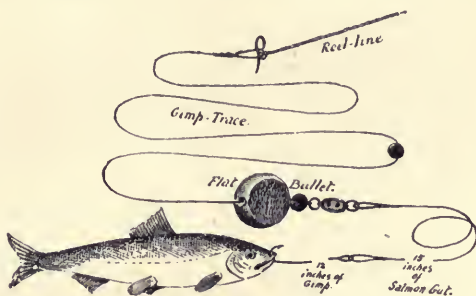


FLAT LEGER BULLET.

pike naturally come after their food—the dace and roach. Therefore, into eddies cast the leger and keep a taut line ; the bullet rests on the bottom, while the bait pirouettes round about in a circle of two or three feet, according to the length of the tether, until it is appropriated by some hungry pike.

With the leger there is no reasonable limit to the depth of water that can be fished. Supposing you throw thirty or more yards from where you are, when the bait drops in the water immediately pay out more line (say three or four yards), and

when the bullet finds the bottom gather up the slack until you have a tight line. On getting a run pay out a little line, and wait four or five seconds before tightening up again and striking the fish; but if after a few minutes no tug occurs, lift the point of your rod and draw the bait to another place, where let it remain a short time to work about the water. By pursuing this method you can search every part of the bed of the river within casting distance, and should any pike near, get a kick or knock on its head by the bait, it is pretty sure to be immediately seized, for pike are certain to be hungry, and on



LEGER-TACKLE BAIED.

the look-out for the food which is difficult to find in floods and thick water.

"Red Spinner," the author of *Waterside Sketches*, gives a good description in that delightful work, of some capital sport I had at Sonning, February, 1875, which will bear repeating, as it shows that under perplexing circumstances, perseverance sometimes commands success.

"During the high floods that occurred in the Thames Valley, and continued for several weeks

in the early part of the New Year (1875), the pike-fishers were completely nonplussed. One well known amongst them, went up the river as soon as there seemed to be a prospect of success, and found the water in colour and consistency not unlike pea-soup. All his efforts were unsuccessful till luncheon time. Then he moored his punt to the rushes in a position commanding a quiet eddy. Discarding the ordinary methods of live-baiting, he affixed a heavy bullet on the trace a yard above the bait, thus improvising a legering apparatus; the result justified his choice of both place and method. His livebaits were large dace, and the yard of trace below the bullet gave them an opportunity of pirouetting in a pretty wide circle. The angler had fortunately "struck ile"; the eddy of his choice happened no doubt to be the furnished apartments into which a large family of pike had been driven by stress of water, and the bait had dropped into their midst like manna in the wilderness.

"Their pikeships one after another simply opened their jaws and absorbed the treacherous dace without moving a foot, taking things ridiculously easy until they 'felt the steel'; then, running madly, they gave splendid sport. In one lucky hour the angler caught six fish, the largest of them 13½ lb., 10 lb., 9 lb., and 8½ lb., the total weighing 49½ lb."

When starting on the war path, never trust to the chance of procuring bait at the riverside, or of catching them there yourself. If you do, it is ten to one you will meet with disappointment, for either the fisherman you have engaged will be without baits, or if there are a few in the well of

his punt, the chances are they will be stale or have been used before. If you angle for them they are sure not to bite, and thus you lose much valuable time, which would be better expended in trying to catch the pike; therefore, always take a good supply of baits with you.

I record an extraordinary capture made by Mr. J. Bedford, of Regent Street, on the 1st of July, 1883, at Marlow Weir-pool, which had been baited for barbel. He was legering with ordinary gut tackle, using lob-worms for bait, when he had a bite, quiet as a roach would give. On striking, a long greedy pull was the response, and Mr. Bedford knew he was into a large pike. Forty or fifty yards of line were immediately run off his reel with a rush that fairly startled him; this occurred several times, but the fish being hooked just outside the lower jaw, the gut was not bitten in two. Each time he tried to lift the fish, it sailed round the pool to return and rest in the same spot where it first took the worm. It was forty minutes before he got a glimpse of the pike's dimensions, and saw his landing-net was not nearly large enough to hold it. He hailed H. Rockell, who brought a larger one, in which the pike, after an hour's play, was landed. It measured 45 in., and weighed just over 24 lb.



"JARDINE" SPIRAL LEGER-LEAD, REGISTERED.

Leger-leads are made in various shapes and weights. The spiral-leads are possibly the most useful and convenient, because by uncoiling the

trace, they can be instantly changed for heavier or lighter leads.

In moderately shallow lakes and the Norfolk Broads, where are weeds growing up nearly to the surface, with 12 ins. or so of clear water above them, very large artificial flies, cast and worked as salmon flies, may often be used with considerable success ; for pike lying in the weeds, when refusing a spinning-bait, will frequently snap at a large fly drawn over them.

These pike flies are about the size of humming-birds ; are made of tinsel mixed with gaudy feathers,



PIKE-FLY, 3 INCHES LONG.

and sometimes are built on two hooks. Pike when hooked on them give capital sport ; almost, if not quite, equalling the salmon. Carter and Co. manufacture a patent pike fly 3 ins. long, with a revolving head, which is a very deadly lure. "Halcyon" spinning flies 3 ins. long make excellent pike flies. On February 23rd, 1878, a pike of 30 lbs. was caught with a pike fly in Lough Erne, Ireland, but the captor is not known.

"Trimmering" for jack and pike in private waters where it is desirable to thin the numbers of those fish, may be occasionally resorted to, but, to

say the least, it is an unfishermanlike way of catching them. As a bit of fun it is sometimes indulged in ; it was considered a fine amusement in "Old Nobbes'" time ; and in *The Boke of St. Albans* is thus described :—"If ye lyst to have good sporte, thenne tye your line to a gose (goose) fote, and ye shall have a gode halynge (hauling), whether the gose or the pyke shall have the better."

Barker, in his *Delight*, published in 1653, tells us that "the principal sport to take a pike is to take a goose or gander or duck ; take one of the pike lines, tie the line under the left wing and over the right wing about the body, as a man weareth his belt ; turn the goose off into the pond where the pikes are. There is no doubt of sport, with great pleasure, betwixt the goose and the pike. It is the greatest sport and pleasure that a noble gentleman in Shropshire doth give his friends entertainment with."

J. J. Manley, in his *Notes on Fish and Fishing*, gives the following account of a tussle between a gander and a pike :—"A farmer in the neighbourhood of Lochmaben, Dumfriesshire, kept a gander who not only had a great trick of wandering himself, but also delighted in piloting forth his cackling harem to weary themselves in circumnavigating their native lake, or in straying amid forbidden fields on the opposite shore. Wishing to check this vagrant habit, he one day seized the gander as he was about to take to the water, and, tying a large fish-hook to his leg, to which was attached a frog, suffered the bird to proceed on his voyage. As had been anticipated, the bait soon caught the eye of a greedy pike, which, swallowing the deadly hook, not only arrested the progress of

the astonished gander, but forced him to perform half-a-dozen somersaults on the surface of the water. For some time the struggle was most amusing, the fish pulling and the bird screaming with all its might, the one attempting to fly and the other attempting to swim from the invisible enemy ; the gander the one moment losing and the next regaining its centre of gravity, and casting between whiles many a rueful look at his snow-white fleet of geese and goslings, who cackled out their sympathy for their afflicted commodore. At length victory declared in favour of the feathered angler, who, bearing away for the nearest shore, landed on the smooth green grass one of the finest pike ever caught in the castle loch."

A rough and ready style of "trimmering" sometimes practised on the Norfolk Broads, known as "liggering," has slain thousands of fine fish. A "ligger" consists merely of a bunch of dry rushes or sedges, to which a few yards of strong line is tied and then wound round the bundle, leaving about a yard depending, which is secured by a small peg stuck in the rushes. On the line is a perforated leaden bullet, and below that the gorge-hook baited with a small live roach. Fifty or more of these "liggers" were sometimes set afloat on the windward side of the Broad, generally overnight, and travelled slowly in the direction of the wind. When the bait was seized, the line came away from the peg, and as the bundle of rushes revolved in the water under the strain of the unrolling line, the pike gorged the bait. This mode of fishing (I believe it is now considered to be poaching) helped largely to deplete those once celebrated pike waters. Pike are more nocturnal

in their habits than most fish. The "liggerers," knowing this, set their destructive engines overnight, and in the early morning rowed out in their boats to gather the slain. On Windermere trimmers are largely used ; fishing parties go out on the lake to angle for perch, and it is no uncommon occurrence to catch over a hundred in two or three hours, for in some parts of the lake perch congregate in shoals, but are small, only averaging a few ounces each. Before beginning "perching," the boatman places a dozen trimmers, baited with small perch (with their prickly back-fins cut off), in a wide circle all round the boat. At the termination of the perch-fishing commences a pursuit of trimmers (sometimes half of those set) that have hooked a jack. The trimmers are flat discs of cork or wood, painted red one side and white the other, and grooved round the edge in which the line is wound, with its end leaded and the bait on, which swims four or five feet below the trimmer.

These painted floaters are known as "man-o'-war" trimmers, and are set in the lake, all with the same colour uppermost ; but when a jack takes the bait, they turn over and show a reversed colour, and thus the sportsmen can tell which trimmer has captured a fish. There is a lake or reservoir not quite thirty-five miles N.W. of London, where for years past trimmering has been rampant, and many a fine pike has met with an ignominious death.

The following description, by J. J. Manley, gives a good idea how the *sport* of trimmering is pursued.

"It was a grand piece of jack-water, as full of fish as a cage is full of birds. A stock of bait were

prepared, roach, dace, gudgeon, and small jack, the latter being an excellent lure, for jack eat jack as dog eats dog.

"Various trimmers were brought into requisition, there were the 'tell-tale' or the 'man-o'-war'; and trimmers in the shape of claret-bottles for floats (not any kind of bottle but claret-bottles, for these will float longitudinally when properly 'trimmed' with water, and with the spare line of the trimmer wound round their necks will unreel when a jack runs the bait); also trimmers with bullock's bladders. A few 'bank-runners,' which are a kind of trimmer, especially when a leger lead and cork beyond it are used, making the fishing a cross between night-lining and ordinary gorge live-baiting, were also set.

"So, too, were a few bough trimmers—that is trimmers in the shape of a letter Y, without any horizontal finishing lines. These are simple, but clever contrivances. The letter Y is formed by any ordinary bit of wood that is bifurcated. Round the bifurcated part the line is wound, and nicked in a slit in one of the arms. The stem of the Y is tied by a separate piece of string to a bough overhanging the water, and when a jack runs the bait, the line slips out of the split arm and runs off the bifurcation quickly enough not to check the fish.

"About fifty or sixty trimmers in all were left to the consideration of the jack, who are certainly more nocturnal in their habits than most fish. In the early morning the bank and bough-trimmers were first visited and found to have done their duty well, but the others required some finding. Some of the bladders had evidently collapsed; but on one was certainly a good fish, for as the

boat with the keeper rowing neared it, the jack evidently felt alarmed and dashed away, pulling the bladder under the water from time to time. Nearly twenty minutes were consumed in the chase, and at last the bladder came into contact with a floating branch, got pricked; and our hopes of a grand fish were dissipated, like the bladder, into thin air.

"There was a somewhat similar hunt after a claret-bottle, which eventuated in the landing of a 12 lb. fish. Some of the bottles and trimmers, however, had disappeared altogether, doubtless drawn down into the weedy depths by the jack when they had come to the end of their tether. About ten trimmers could not be found; on about ten more there were no fish, the gimp of some having been bitten through, or the bait of some rejected after it had been taken. On twenty were jack of some kind, great or small, and on one a grand perch of nearly 4 lbs. in weight. This may suffice as to the result of the day's—or rather night's—trimmering."

But let it be added, that it is not every owner of a lake like this, which was once one of the best private pike fisheries in any of the home counties, who would allow it to be depleted with trimmers.

When fishing the Avon, at Downton, near Salisbury, with the late Francis Francis, we saw in the keeper's hut lots of bottle-trimmers, with baits unremoved from some of them, and the lines on all were wet, just as taken from the river. The pike-fishing there in consequence of this trimmering was not worth the trouble of putting rods and tackle together for. Hofland says trimmer-fishing is un-

worthy of a sportsman, and that the skilful artist will disdain to have a trimmer in his possession. Mr. Pennell says trimmering ought to be the abomination of all pike-fishers ; and he is furthermore of the opinion, which all true sportsmen will thoroughly endorse, that those anglers who aspire to become adepts in trimmer-fishing should procure a good supply of old bottles, rusty hooks, and clothes-line, and the assistance of the most notorious poacher and blockhead in the neighbourhood ; and the chances are that the angler will find himself exactly fitted to his sport, both in tackle and companionship, without violating the bond of like to like.

An important factor with regard to pike-fishing, is the fence months, during which it is illegal to catch those fish. Previous to the Mundella Freshwater Fisheries Bill of 1879 being passed and becoming the law, pike and other so-called "coarse fish" might be captured all the year round ; and I believe they may be in the Norfolk waters even now. However, the Bill as passed was a move in the right direction ; fish were in some measure protected and the long-suffering coarse-fish anglers were thankful for small mercies. Yet the Mundella Bill was for many reasons a mistake, being full of errors as to the months and time during which some fish were fenced. For instance, in February pike are gravid with spawn, and "shed" in March, or, in late seasons, the first or second weeks of April ; while perch spawn in May ; carp, tench, bream, and roach late in May or early June ; yet all are "fenced" from March 15th to June 16th, and many of the *cyprinidæ* have not recovered condition until August. The Mundella Act wants amending, and it should be made illegal to capture

pike after the last day of February and before the 30th of June.

The trophies of anglers, and of the members of Angling Societies, are seldom mounted without some kind of pictorial embellishment ; and among the best examples of modern taxidermy were specimens of very fine pike at the 1883 International Fisheries Exhibition, South Kensington. Among other grand fish were pike of 37 lb., 36 * lb., 35 * lb., 32 lb., 30½ * lb., 28 * lb., and downwards to 20 lb., the weights of which were all authentic : but the weights of many others exhibited (as specified on their glass cases) were, to say the least, doubtful. When taking plaster of Paris "casts" of fish it is very different, for they cannot be "faked" and made to appear larger, than when alive in the water. The wet plaster of Paris is simply poured on the fish, and moulds itself to the exact length, girth, and contour of the specimen, perfectly reproducing every fin, scale, and muscle.

Casts were made by the late Mr. Frank Buckland of my above-mentioned pike which are marked *, also of some of my large perch and a fine grayling, which were painted by my artist friend, the late Mr. H. L. Rolfe, who depicted the colours of the fish soon after capture ; and the perfection of simulation could no further go, nor the art of making the unreal appear as life,

"Before decay's effacing fingers
Have swept the lines where beauty lingers."

THE PERCH.

CHAPTER VIII.

THE PERCH (*PERCA FLUVIATILIS*).

“The bright-eyed perch, with fins of Tyrian dye.”

POPE.

THE freshwater perch (*Perca fluviatilis*) is a typical member of the Percidæ family; in fact, although there are other spinous-finned fish, the perch may be said to take first place among the members of his tribe, as—

“Prince of the prickly cohort!”

The perch is not only one of the most beautiful of the fish which swim in our rivers and lakes, but ranks as a prime favourite with anglers, because of the excellent sport it affords. A distinguishing feature is its *second* dorsal fin; its front dorsal has from 13 or 14 sharp spinous rays: a weapon of defence and offence, as some anglers have discovered when they have incautiously handled the fish; its *operculum* (gill-cover) is also furnished

with a sharp bone, something like that of the small sea-fish—the stinging weever (a species of *Percidæ*), which is quite capable of giving a painful puncture. When a perch is in full season, his cuirass of golden-brown scales (in shape, *ctenoid* or comb-like) are variegated with five, and sometimes six, transverse bars of a dark green-bronze colour, shaded with a lovely iridescence, as also are the gill-covers. The ventral fins are situated on the breast below the pectorals, and are, with the tail, a brilliant red. The teeth are large, and numerous on the palate as well as the jaws. He is a plucky fighter, and when he sallies forth from his concealment, with his spiny gill-covers distended and prickly dorsal fin erect, like a warrior, at the word of command to “fix bayonets”—all ready for the combat—even the pike respects him, for he would be a tough antagonist to swallow.

When quiet and at rest, the perch sheathes his back fin, and “slopes swords.”

In the matter of food he is omnivorous, and when hungry has a craving stomach, which, Dr. Badham **Habits** in *Fish Tattle*, says “comes up at least of perch half-way to meet the bait, as with a hand-like effort to grasp the food.” A lively worm is his *bonne-bouche*; even in worms he has a choice. A middle-sized one with plenty of movement or wriggle in its tail is usually preferred; but there are times when minnows or small gudgeons are more seductive bait than worms, and an ordinary fish globe, with a few dozen minnows inside and muslin tied over the top so that they cannot escape, and then sunk in the water, forms a very attractive lure for perch. There is a glass-trap to hold minnows made

expressly for the purpose of enticing perch together, sold, I think, by Messrs Alfred and Sons, of Moorgate Street, E.C.

Perch are sometimes capricious in biting or feeding, and appear to be very sensitive to electric changes in the atmosphere. In hot weather, with the south wind blowing, they usually feed all day long ; at other times, not at all in the day, but generally at early morning and during the evening ; they like a gravelly bottom, and where the water is not too swift, especially near growths of water-lilies. In winter perch are usually found under hollow banks, where there is a gentle flow of stream ; beneath boughs overhanging rather deep water, near submerged roots and tree-trunks, old flood-gates, moss-grown piles, and campsheathings. Such places, where spinning or "floating" with minnow or small gudgeon would result in a hang-up to some obstruction, with loss of tackle, can be fished more satisfactorily with a paternoster. There was a bough (I think it still remains) near the entrance to the Abbey stream, Penton-Hook, Thames, where a few winters ago I caught seventeen handsome perch in a little over an hour, paternoster fishing with minnow.

Perch spawn in May, and during summer and early autumn are somewhat solitary in their habits ; but after frosts have set in they become gregarious, consorting together, so that where one is caught the angler may expect others will find their way to his landing-net. Female perch are much more numerous than males. Frank Buckland states in *History of British Fishes* that he had two female perch sent him that weighed respectively 3 lbs. 2 ozs. and 2 lbs. 11 ozs. ; he and his secretary

counted the eggs, which numbered 155,620 in the larger fish, and 127,240 in the smaller.

The ova of perch are about the size of millet seeds, and instead of being deposited and separated one from another as in the *Salmonidæ*, are (when extruded) invested with and bound together by a copious matrix of semi-transparent mucilage, and are hung in loops or festoons of ribbon-like bands upon water-weeds, among submerged sedges or boughs; the perch goes into such places and rubs or presses herself against the weeds, until one end of the band of ova has become attached, and then swimming slowly away the eggs are voided. Perch will bear a strong admixture of sea water. I have known them to be caught in the salmon nets below Warcham, where the river Frome drops into Poole Harbour. They are very abundant in some of the Norfolk Broads, and grow

to large dimensions; besides the two I have already mentioned as specified by the late Mr. Frank Buckland, he particularises two others—a fine fish of 4½ lbs. taken on a “ligger” in Wroxham Broad; also one of 4½ lbs. in the Bure; another weighing 4¾ lbs. was some years ago caught in the reservoir at Daventry. My own largest specimens, captured in the Colne and Loddon, were 3 lbs. 8 ozs., 3 lbs. 2 ozs. and 2 lbs. 15 ozs., of which I have the “casts” made by Frank Buckland and painted by H. L. Rolfe.

The naturalist Pennant (in *British Zoology*, published 1761, 1769) mentions a perch caught in the Serpentine, Hyde Park, that weighed 8 lbs., but the evidence is not satisfactory. The river Lunan was said in 1894 to have produced a perch weighing

5 lbs. 13 ozs., relative to which fish the late Lord Inverurie asked a question in the *Fishing Gazette* of February 3rd, 1894, and received the following answer:—"A heavy perch.—The river Lunan, on which the town of Forfar is situated, is a tidal river, and sea-perch, or bass (*Perca labrax*), ascend the brackish water a considerable distance. Was not the Lunan fish caught by Sergeant Milne a sea-perch? What number of bony rays were there in its dorsal fin?"

There was no reply to this.

Dagenham Breach, Essex, was also credited many years ago with an 8 lbs. perch, but as there had been an exceedingly high tide, when the Thames overtopped its bank, causing an influx of brackish water into that lake or gulf, the fish spoken of was no doubt a *Perca labrax*. A perch of 6 lbs. was accredited to Mr. Hunt, of Brades, Staffordshire, as captured by him in the Birmingham Canal; and another of the same weight is said to have been taken at Slapton Ley. Some years ago a perch of 7 lbs. was reported to have been taken in the New Cut, between Readham and Herringfleet, but as the water there is tidal and brackish, the fish was doubtless *Perca labrax*. All these specimens were "topped" by a fish at the 1883 International Fisheries Exhibition. It was shown by the Birmingham and Midland Piscatorial Association and described on its glass case, also in the official catalogue, as a "10½ lbs. perch, taken on one of the Norfolk Broads"; it was proved to be a bass or sea-perch, with the spines of its dorsal fin "faked," and five dark stripes painted on the body. It was promptly turned out from the exhibition as a fraud. The lakes of Lapland hold enormous

perch. Yarrell speaks of one, recorded by Schäffer, of about 40 inches in length, the head of which (nearly a foot long) is preserved in the church of Lulea, Lapland.

The waters of Norway and Sweden, also the Danube, contain gigantic perch, far exceeding the extreme weight spoken of by some angling writers as having been caught in this country, where quantity and not extreme size seems to be the character of the sport.

For instance, the *Field* of August 25th, 1884, gave an account of "the capture by two anglers in six hours (between eleven and five o'clock) of more than 800 perch in Slapton Ley," a well-known piece of water in Devonshire, which may be fished by all comers on payment of a small fee. The accuracy of the statement was questioned, but the evidence of subsequent correspondents confirmed it; one gentleman stating that he and a friend in five hours' fishing took 476 perch. Next to this Devon lake, or "ley," perhaps Windermere might be mentioned as holding countless shoals of small perch; in both these waters the fish average about five to the pound weight, a half-pounder being considered a fine specimen. Corrib and some other Irish lakes and rivers hold large perch, where $2\frac{1}{2}$ lbs. to 3 lbs. fish are not infrequently caught.

In Virginia Water and other private lakes I know of perch of fine size; and I have two fifteen-acre ponds in my mind's eye, where three-pounders are not at all uncommon. But possibly among our southern rivers, the Colne, Kennet, and Loddon have produced the finest fish; my own best catch in the Colne was in 1875, seven perch weighing

18 lbs., the largest $3\frac{1}{2}$ lbs., and in the Loddon five of the aggregate weight of 12 lbs. The two finest Kennet records I ever heard of were made by the late Mr. Francis Francis, who took home thirty-seven perch weighing 60 lbs. (many over 2 lbs. each), the selection of one day's fishing; and the friend who angled with him had three large perch on his paternoster at the same time, of which he bagged two weighing 2 lbs. and $2\frac{1}{2}$ lbs. respectively; while the third fish, which was the largest of the three, got away.

Near Kintbury, on the Kennet, Mr. C. Pennell and a friend took one day "several dozen perch, averaging more than a pound weight each, and the largest considerably exceeded 2 lbs."

On November 8th, 1876, the late Mr. J. H. Keene caught fifteen perch weighing 21 lbs. in Virginia Water, and a few days before that eight, averaging $1\frac{1}{2}$ lbs. each; also in the same water (February, 1877) a friend of mine captured several over 2 lbs. each, fishing with brandlings and lobworms on a light leger-line; and in 1882 two other anglers I know, fishing the lake at Eastwell Park, Kent (Lord Winchelsea's), caught with worm baits fifty perch, some of $2\frac{1}{2}$ lbs. each, of the aggregate weight of 69 lbs. Of late years the Thames has not produced many perch; but as they are now better looked after at spawning time and protected from the swans—which then greedily devour the perch ova—those fish are again increasing in number. The largest specimen Thames perch I know of weighed 4 lbs., and was caught at Sunbury, January, 1879. In the Thames a 2-lbs. fish is now considered a fine specimen, and although there may yet be three-pounders in the river it will

take a great deal of perseverance to catch them. As the late J. J. Manley, wrote respecting perch-fishing: "If ever you should capture one of 4 lbs. invite all your piscatorial friends to an oyster supper (3s. 6d. per dozen) with still Moselle, or better, Chablis; for you have accomplished the object of your life, and fulfilled your mission; you have nothing else worth living for." And to quote again my reverend friend, "What bait will a hungry perch *not* take? for he is well-nigh omnivorous.

Varieties of bait He will take any kind of worm, from the tail of well-scoured lob, delicate as the best prepared tripe or cod's sounds, to a bunch of stinking brandlings, the effects of the handling of which carbolic soap and a scrubbing brush can hardly efface in a week. He will take a *salmi* of gentles, a nubble of paste, an artificial spinning-bait of almost any pattern; yea, even a gaudy fly in some waters. As for ordinary spinning and live baits—gudgeon, dace, roach, chub—he has little choice generally speaking, though perhaps a gudgeon is his favourite. And what 'specimen' live bait will he not seize? When you are fishing for large jack, a perch of 2 lbs. (say) will take a bait intended for a pike of 12 lbs., as if he had any quantity of capacity for internal storage, which, however, is not the case; indeed, at times he is by no means well on the feed, and like other fish—though perhaps not to the same degree—is affected by wind and weather, and by other circumstances; but when they are biting boldly, and the angler drops his bait quietly into the midst of a shoal of perch, if he fishes carefully *and does not hook and lose fish*, he may capture nearly every one of them." Mr. C. Pennell's wide experience testifies to this. He says: "I have seen

a whole string of perch following the bait one after another like so many shadows ; and when they are on the feed in this way, it would not be an impossible feat to take every fish in the shoal. In fact, I believe that I have literally done so on several occasions ; and I remember once a visit to the Avon, above Christchurch, where the perch lie mostly in holes easily fishable, after which visit I should not have much cared to fish the same water for a year or two ! ”

My own observations have convinced me that a perch appears sometimes to be fearless. I have, when pike-fishing in a lake or river, seen a large perch sail with prickly fin erect close up to the boat or bank, seize the pike bait, and shake it as a terrier does a rat, eventually getting the head and hook into his mouth, bristling all the while like a porcupine, and his colours showing with increased brilliancy ; then, retiring with his prey, only to be hooked and caught himself. Perch will at times gorge themselves to repletion, and yet keep feeding on minnows, with the tails of some protruding from their throats. In the punt-well or basket they usually eject some from their distended stomachs, in some cases digestion of the minnows not even begun, so recently were they swallowed.

The late Mr. Frank Buckland considered perch to have more intelligence than most other fish ; also that the best way to test a fish's intelligence (like that of other animals) was by appealing to its appetite. “ At the aquarium at the Zoological Gardens, Tennant, the keeper, was accustomed to frequently feed the perch with live minnows. After a while the perch ascertained by a process very like

reasoning that minnows were kept in another portion of the fish-house. Whenever they saw Tennant go near the place where the minnows were kept, they began to rush about as if in anticipation of the welcome feed, which, somehow or other, they had ascertained was forthcoming for their benefit." But of all intelligent fish the most intelligent must be the *Perca scandens* or *Anabas scandens*, the Climbing Perch, a native of Ceylon and other Eastern countries ; it not only travels over land, but climbs trees to the height of several feet in pursuit of the food on which it exists, using the spines of its dorsal fin and its prickly gill-covers, also the tail and its stiff scales, to enable it to climb the tree-trunks. Sir Emerson Tennent tells all about this queer perch in his book on *The Natural History of Ceylon* (published 1860).

The tenacity of life in perch is almost as extraordinary as in carp ; they may be packed in damp weeds, moss, or hay, and if occasionally wetted, can be conveyed a hundred miles or more, without perceptible loss of vitality, and turned alive and vigorous into a pond or water-tank. From the upper parts of the Thames, above Moultsford, I have brought them to London, packed in the way described, and kept them alive for days afterwards. If packed this way, perch will in the winter survive a journey—even if apparently frozen—and will recover animation if thawed by placing them in water three or four degrees above freezing point. Cold-blooded animals preserve vitality for a lengthened period in a frozen condition : Sir John Franklin discovered fish perfectly frozen, but afterwards capable of resuscitation.

Do perch feed at night ? As for myself I never

caught one after nightfall, nor have I ever known one to be captured at night, and I believe them to be somnolent fish.

As a typical fish in heraldry, or as a symbol appropriated in the dim past by ancient potentates and families, I fear the perch has been **Fish in** altogether ignored, for I have searched **heraldry** heraldic and archæological works relating to the subject fruitlessly ; and while the salmon, pike, barbel, eel, the lobster and crab (which by-the-by are crustaceous) and even the whale (a mammal) have been taken up as emblems for family crests and coats of arms, I find the perch makes hardly any show at all. Of fishes, heraldry takes comprehensive notice ; the fish symbol has come down to our own day, and “the Pisces” may be seen on the doorway of Iffley Church, on the Thames near Oxford ; in the nave of Peterchurch in Herefordshire, and elsewhere. Whales are the insignia of Whalley Abbey ; bream of Peterborough ; haddock of Peterhausen ; herring of St. Edmunds, and also of the Black Friars Priory at Yarmouth. The arms assumed by monasteries were sometimes those of their benefactors, as the pike of Calder Abbey, largely endowed by the Lucy family ; and the salmon of St. Augustine’s at Bristol, in memory of the fishery attached to that Abbey by the Lords of Berkeley. Many prelates and some primates have borne fish crests. Peter Courtenay, Bishop of Exeter, afterwards of Rochester, assumed a dolphin, and transmitted it to his sons Robert and Baldwin. A dolphin curves itself upon the arms of John Fyshar, another Bishop of Rochester, who also bore three eel-spears. Archbishop Herring, and Thomas Spratt, Bishop of

Rochester, display on their coats of arms the fishes of their own name; and St. Mungo's salmon figures in the arms of Glasgow. A very lengthy catalogue might be given of prelates, and other dignitaries, also of royal examples, who have gone to the fish-world for their crests. Barbel appear in the royal arms of Bohemia and Hungary; also in the arms of Queen Margaret of Anjou; and salmon on those of the Princes of Lorraine.

As an edible fish, perch enjoys a fine reputation, and a river perch has decided claims on our consideration; those of the Hampshire Avon, ^{Perch as food} the Colne and Kennet are very good; but a Thames perch is the best of all river perch. I have caught and eaten Corrib perch—those of Maidstone, Kent, and Firle, Sussex—also of Naseby, Northamptonshire; the last “spatchcock'd” and broiled in butter, in the Bungalow on the banks of the reservoir, by a lady angler (my host's wife), were excellent. Therefore, I cannot but endorse what Ausonius says in his lines, which have been thus translated:—

“Prince of the prickly cohort, bred in lakes
To feast our boards, what sapid, boneless flakes
Thy solid flesh supplies! Tho' river-fed,
No dantier dish in ocean's pastures bred
Swims thy compeer; scarce mullet may compete
With thee for fibre firm, and flavour sweet.”

Among the ancients the perch was held in high esteem. Galen, the celebrated physician—born A.D. 150, died A.D. 201—prescribes it for invalids generally; and one famous doctor, though he taboos other fish, flesh, and fowl to certain patients, permits them perch. Izaak Walton, commending that fish, mentions the proverb “More wholesome

than a perch of Rhine." Dr. Badham tells us that on the Continent perch are generally stewed in vinegar, fresh grape juice, orange, or some other sour sauce ; but on Lago Maggiore they are roasted in their scales and basted with an acid sauce ; while in Holland butter is added. Among ourselves some cooks simply boil ; some broil ; some fillet and fry them with egg and bread crumbs.

Split down the back and laid in the form of a spread-eagle (spatchcocked), with the scales intact, on a gridiron, and broiled with a suggestion of butter and cayenne, served piping hot, with a squeeze of lemon, the fish is very good ; or baked whole in his jacket ; as also, skinned and broiled delicately in buttered paper. Perch may be cooked by the riverside (as gipsies do a hedgehog), by taking the fish as caught, not drawn or otherwise cleaned, and procuring some clay and with it coating the fish about one-eighth of an inch thick ; or, failing clay, enveloping in several coatings of paper (newspaper does very well) ; thoroughly saturate the paper by holding it in the water, having previously lighted a fire of wood or sticks, and making a quantity of hot embers, in which place the fish, and bake it. Perch done in this way are exceedingly nice. An angler who is frequently punt-fishing should get a small charcoal stove with a grating on top like a gridiron ; this can be kept in the punt and fish cooked, as fancied or required.

A small species of the Percidæ family (*Acerina vulgaris*) and very much resembling the ^{The pope} perch in appearance is the Pope or Ruffe. ^{or ruffe}
The distinctive mark is in the back fins, which in a pope are joined together, but in the perch are clearly separated ; neither has the pope transverse

markings or bars, but is coloured almost exactly like a gudgeon, and is often caught when angling for the latter fish. Its average length is four or five inches. Pope are plentiful in the Thames, and the Berkshire Canal; also in the rivers Kennet, Yare, and Wensum. They are bold-biting fish, with iridescent opal tints on the cheeks, spots on the spinous dorsal fin, and a sharp point on the gill-covers.

Buckland: says "A cruel habit, which probably originated in some idea connected with Roman Catholic persecutions, is practised up and down the Thames, and almost all over England. When a pope is caught, a wine-cork is pressed tightly on to a spine of the dorsal fin, and the fish is turned loose again into the water, to bob about upon the surface. This is what is called 'plugging a pope.'"

CHAPTER IX.

METHODS OF ANGLING FOR PERCH.

THE rod selected for this branch of the sport should be a cane one—light in the hand—and 12 feet or 13 feet in length—moderately stiff but springy, with standing rings, such as **Pater-**described for pike-fishing; or the pike- **nostering** spinning rod, if not a weighty one, will answer the purpose admirably. Use a Nottingham winch with a fine running-line and a perch-paternoster, which, properly made, should consist of 4 feet of selected round, sound gut; this is called the trace, and has a small pear-shaped lead plummet looped on the bottom of it, which may weigh $\frac{3}{4}$ oz. or less, according to the depth of water or strength of stream; at any rate, use as small a plummet as is possible; for with fine tackle and light leads better sport can usually be obtained, especially if the perch are feeding frugally, for they are sometimes not mad on the feed. About five inches above the plummet tie a loop in the trace (after well soaking the gut), and fifteen inches higher tie another loop, to each of which attach a No. 6 sneck-bend hook, bound on to five inches of fine salmon-gut, the stiffness of

which will make the hooks stand out at right angles to the trace. If fishing deep waters, such as a weir pool, a third hook, No. 9 on gimp, may be added with advantage another fifteen inches higher up the trace, on which a live gudgeon, or small dace may be placed, on the chance of catching a pike ; the middle hook, or the top one (if only

two are used), should be baited with a large minnow (those from the Colne are very large), and the bottom hook, next the plummet, with a nicely scoured worm ; or if a three-hook paternoster, two with brandlings or red worms ; but any way, see that neither gudgeon, dace, minnow nor worms are stale, but strong and lively. Red marsh-worms, garden-worms and brandlings are excellent bait for perch. The minnows must be hooked through the side of the upper lip, and it should be remembered that they are delicate little fish, and won't bear much handling or pulling about.



PERCH "PATERNOSTER"

Paternostering for perch is much the same in method as that pursued for pike. Drop the bait in carefully ; let them remain on a tight line for a few seconds ; if no result, move them quietly to another place and then search all the water round about. Deep, quiet water, where there is a gentle eddy ; holes, where the roots of trees run down, and their pendant branches shade the retreat from the fierce heat

of the sun; the moss-grown piles and camp-sheating about locks and sluice-gates, and the back-waters of mill-streams are all favourite perch haunts. In canals and navigable rivers perch seek the deeper parts where barges lie, and about floats of timber, choosing in preference (if obtainable, places where the bottom is sandy and pebbly. It is advisable when for the first time on an unknown river in quest of perch, to note where the small fry of dace, roach, gudgeon, &c., congregate, and there to drop the paternoster quietly in, and keep the line taut from the winch the moment the bottom is felt; then move it gently along the bottom lifting it now and again by the point of the rod until the water adjacent has been thoroughly searched. If fish are there, and in a feeding humour, the angler will soon be aware of it; at the sharp "tug-tug" he should strike at once, and the perch nine times out of ten will be hooked. If it proves to be a good fish, be in no hurry, but play him gently, for perch have tender cheeks, and if handled roughly, a hole is easily torn, out of which the hook may very likely drop if the slightest slackness of line is allowed, and the perch be lost. If played properly, after the first few plunges are over the fish is your own; then get him to your landing-net, and mind his prickly back fin. Perch sometimes refuse a minnow on paternoster, or only mouth and kill it; if the angler finds this is the case, he should hold a loose yard of line in his left hand, and on feeling the fish's tug slack the line and drop the point of his rod; wait two or three seconds, then recover the slack line, strike firmly but gently, and the chances, are he will hook his fish; by following this suggestion, he gives the

fish time to turn the minnow or small gudgeon into his mouth head first ; for perch always seize a fish bait across the middle in the first instance.

If refusing minnows on paternoster, perch sometimes take them greedily when put on a hook

Float- and shotted trace, with float, and floated
fishing down or along the swim ; so that if they will not feed to paternoster tackle, floating the bait may be tried with advantage. Stone-loach are excellent baits for perch. Anglers should always have a good supply of worms ; to which end gardeners and gardeners' boys should have orders to collect all the worms they possibly can, and to throw them into a tub or box half filled with turves and moss, in which the worms can scour themselves, get tough, and bright in colour. "Lobs" require a week at least in moss, and well looking after if the weather is warm, also picking over daily, the stale ones being thrown away ; but if wanted for immediate use, put a handful of worms into a pot with some tea-leaves squeezed dry, and let them remain for a few hours, when they will be found in nice condition. I have omitted to explain the reason why the lowest hook of the paternoster is placed so near the plummet, which is, that if the bait be a minnow, or small gudgeon, it may be near the ground, where (as a rule) the largest perch lie, it being the habit of the minnow on seeing a perch near, to strike up, as far as the gut hook-link will allow, in its efforts to escape, and thus attract the perch. The bottom hook usually catches most fish ; and this is generally the case when paternostering with worms for baits. There are few fish more intelligently wary than the perch. In waters that are much fished perch attain a degree of experience in the matter

of bait and fishing tackle which would do credit to many anglers, who often insult a perch's intelligence by fishing for him with a monstrous apparatus of hog's bristles, shots, and bone which they have bought at a tackle-maker's, and fondly believed to be the "right sort" of paternoster. As Mr. Francis rightly observes about such abominations, "if he (the perch) condescends to take your minnow at all, he will take it probably *without* the hook."

Where there are slow eddies and deep holes, with but little stream, some of the largest perch are frequently caught by using a float ledger made thus: Attach a gut bottom of a yard length to a Nottingham running line of fine silk; fit up a long cork float on the silk line with a small bullet having a hole drilled through it in which the line runs easily and freely; the drilled bullet is, of course, below the float, and a split shot is pinched on the line just above the gut to prevent the bullet slipping lower. Selecting the hole or eddy you intend to fish, arrange the float so that the bullet just rests on the bottom, and thus find the proper depth. Then select a fat luscious-looking lob, one with a red vein running down to its tail if possible; put the barb in an inch below the head, and "threadle" the worm until the shank of the hook is just covered. Worms put on in this manner show much better than when looped on in a bunch, and must be more attractive baits. Cast out your tackle, and when the bullet reaches the bottom, draw it towards the point angled from, until the gut length is likely to lie straight on the bed of the river, and if there is any current the float must be held back, the thin silk line between the

rod top and the float being clear of the water. Do not be in a hurry if a dip of the float indicates that a fish is attacking the worm, for the perch may be a big one, and in consequence much more cautious than those of ordinary size, therefore wait until the float goes down clean out of sight, then strike, but not too hard, and look out for "a long, strong pull," and ructions at the top joint.

Hardy Bros., of Alnwick, are producing excellent hooks in various sizes for perch-fishing, in which the barbs stand out sideways and, the points being



N^o 2
Pike.



SECTION

N^o 3

N^o 4

N^o 5

Perch Sizes.

HARDY'S "SIMPLEX" LEADS.

shaped like lancets, injure the minnow or worm baits but very little, so that they live longer than when on ordinary hooks; the gut is also reinforced at the binding (close up to the shank), which gives additional strength. They also manufacture "Simplex" leads for perch-spinning, which are easily attached to or detached from the trace. To fix them they can be opened with the fingers or the aid of a penknife; a knot in the trace being brought into where the hole in the lead is cut, the lead is then closed with the fingers or pliers.

Good sport may generally be had with perch by

spinning either with natural bait or with artificial minnows, small spoon baits, Hearder's "plano convex" spinners, and other diminutive but very deadly lures—such as Farlow's Spin-
ning.

"Hogback" spoons and "Magnet" spinners. These are made of light metal, with the hook eyed and attached to a solid ring, thus combining lightness with strength. They are sunk with two or three shots on the trace, which has, of course, a small double swivel or two in it; or the trace may be weighted with a $\frac{3}{4}$ -inch Archer-Jardine lead, or a No. 3 Hardy's "Simplex" lead,



"HOGBACKED" SPOON.



THE "MAGNET" SPINNER.

and fished as a spinning lure, or on the sink and draw method. For a natural spinning bait none is so good as a large minnow; those from the river Colne water-cress beds are from 2 inches to 3 inches long, and can usually be obtained of Hancock and Co., 308, High Holborn, or of Carter and Co., 137, St. John Street Road. The next best bait is a small gudgeon or stone-loach. A trace, such as described for pike-spinning (see page 58), but made of selected gut fit for trout-fishing, answers the purpose exactly; the flight on which to place the minnow or small gudgeon may be like the following, which is known in the trade

as the "Pennell" perch tackle, and the method of baiting with a minnow is shown below.

With a baiting-needle, or a disgorger, push the lead down the bait's throat and into its belly; insert one of the hooks of upper triangle through the back, about a quarter of an inch behind back fin, leaving the tail triangle to hang loose; adjust the movable lip hook so as to crook the bait into



THE "PENNELL" PERCH FLIGHT.

the form shown; and finally, pass the lip hook through both lips of the bait, upper lip first. If the distance has been wrongly guessed and the bait does not spin brilliantly, increase or diminish the curve by shifting the lip hook, which can be readily done without taking it out, by loosening the surrounding coils, pushing the gut through the loops (upwards or downwards as the case may be), and again tightening the coils.

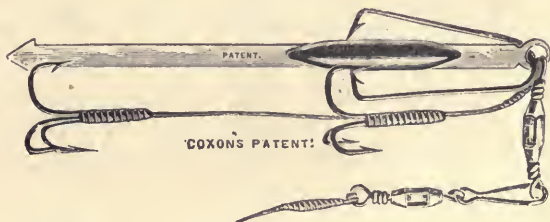
The trace should be attached to a light plaited

line of waterproof silk. A very small "Archer" spinner, such as in size is used for trout, is a capital tackle baited with large minnows or small gudgeons (see illustration).



"ARCHER" SPINNER.

So also is the "Coxon" patent spinner, in small sizes for perch-fishing, with a small natural bait. The various artificial lures, such as Phantoms, Devons, and quill-minnows ; also minnows or small fish preserved in quickleen, methylated spirit, and other antiseptics, are very good substitutes for spinning baits in the absence of natural ones.



"COXON" SPINNER.

Float-fishing for perch with live baits or worms, either in rivers or lakes where these fish are plentiful, as a rule gives excellent sport. A light pater-noster rod, a fine running line of prepared silk on a Nottingham winch, such as is shown on page 47, are the tackles required ; and in addition a float on a

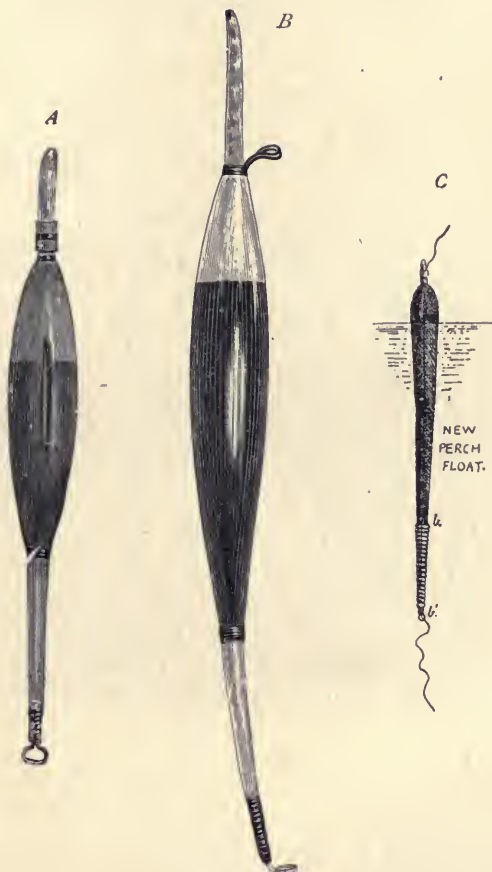
gut trace properly shotted to the float's buoyancy; also a No. 7 hook on gut is a size which will do equally well for minnow or worm fishing.

For ordinary fishing a float this pattern (*A* on opposite page) will be found the correct thing; but when fishing some distance away down a stream or a weir by the Nottingham method, a traveller float (*B* on opposite page) will be found more suitable for the purpose.

An excellent float for perch and other fishing has recently been invented by Mr. J. Jeffery, of Epsom, which exactly provides a requirement long needed by anglers, who, like myself, have at times been so situated as not to be able to cast a float far enough to reach the desired spot where fish were likely to be congregated, unless the gut trace or line was heavily shotted. These new floats—which are made in two or three sizes—have a coil of lead, *b b'*, wound round them at the bottom end, the weight of which is so accurately adjusted that it submerges them to the proper line of flotation, *a a'*. (See illustration *C* on opposite page.) On making a cast the float travels as a weighted arrow does from a bow, striking the water with a kind of “shoot,” and then “cocking” immediately. Two or three small shots are sufficient for the gut-hook link to sink the bait. For “roving” alongside banks and under trees these floats answer admirably. I am informed Messrs. Allcock and Co. have secured the patent.

If the bait used is a minnow it should be carefully hooked through the side of its top lip; if a worm it must be tenderly threaded up the hook shank, with half an inch or so of its tail hanging over and beyond the barb.

It is best to let a perch take the float well under water, giving a second or two before hitting the fish, when a bite is perceived ; and then, keeping



PERCH FLOATS.

a moderately taut line, but not holding the fish so hard as to tear the hook out of the thin and

tender cheek. - If the water is very bright and perch are quite off feed, take away the float and substitute a small perforated bullet for a sinker ; throw out the worm across and rather up the swim, and draw it up and down the water slowly towards you, with a motion similar to spinning ; a brace or two of fish may be taken this way when they are very dainty.

Where there are deep, slow eddies without much stream, some of the largest perch, and now and again fine chub, are captured by using a gut bottom 2 or 3 feet in length attached to a fine Nottingham or Derby silk line. Before attaching the gut bottom fit up a cork float on the line, with a small perforated bullet below it, the hole in the bullet being smooth and large enough for the line to run easily and freely. Then, having looped on the gut bottom, a split shot is fixed on the line just above where the gut is tied or looped on, so as to prevent the bullet running over the loop in the line on to the gut. The float must be so arranged on the line that the bullet just touches the bed of the river ; and the proper depth of the place selected to be fished being obtained, select a flat and nicely scoured lobworm ; put the point of the hook in an inch below the head of the worm, and carefully thread the worm until the shank of the hook is just covered. Worms put on this way are much more attractive than when looped up on the hook. Then having cast out the bait, when the bullet has reached the bottom draw it a little towards you, so that the gut lies straight between the bullet and bait, and hold the float back a little, especially if there is any current, the line being clear of the water from point of rod to the float. Do not be in a hurry if a

dip of the float indicates a bite ; for it is likely to be a big fish, and a more cautious one than the smaller of its tribe. Wait rather until the float goes clean out of sight, then strike, but not too hard ; look out for some good sport, and carefully play the fish to the landing-net.



AERATED COMBINATION BAIT-CAN.

“ Roving ” a minnow for some distance alongside an overhanging bank hollowed out by the wash of the stream, is another capital method, and easily accomplished on running-tackle by the Nottingham mode of fishing.

I have often thought it would be a comfort to anglers if livebait, say minnows and small gudgeon,

worms of two kinds, *i.e.* "lobs," red-worms, or brandings and gentles, could all be carried in separate compartments in one handy "lock-up" vehicle to the lake or riverside. Bearing this in view, I have invented aerating combination bait-cans, which fulfil the advantages enumerated. I give an illustration on the previous page. The usual application has been made for provisional patent.

Dead-bait fishing for perch is not much practised, but sometimes a large one will take a dead gorge-bait when the angler is pike-fishing; in fact, I have known big perch to seize a bait which in size was fit for a 15 lbs. pike, and never leave hold until it succeeded in getting the bait half-way down its throat, when of course the perch was hooked, played, and landed. An instance of this occurred when I was fishing near Glynde (February 23rd, 1882) with a companion who caught a 3 lbs. perch, which took and gorged a gudgeon bait, five inches (at least) in length. In hot weather, on bright and calm days, I have known perch to take artificial flies rather readily. A fly, sunk to mid-water, by pinching a split shot on to the gut, close up to the head of the fly, will usually ensure the capture of a few brace; and the most killing flies are the large Wickham Fancy, Red Ant Fly, Soldier Palmer, and small Alexandra or Halcyon.

CHAPTER X.

SPORTING FISH OF THE PERCH FAMILY.

THE pike-perch, called *Sandra* in German, and "glass-eye" in the United States, belongs to the *Percidæ*, and is found in most of the rivers and lakes of Russia, where it is caught in the spring in large quantities, and dried as an article of food. It has been calculated that a quantity exceeding 45,000,000 are captured annually in the Delta of Kuban and the Sea of Azov, from which there is a large export of the roes of these fish, made into a kind of *caviare*, and sent principally to Greece and Turkey. Oil made from the fat of the fish is used on fast days as a substitute for vegetable oils; also in the preparation of sturgeons' roes. Pike-perch are not plentiful in the Elbe and Oder; are unknown in the Rhine and Weser; but grow to a large size in the Bothkamper lake, Schleswig-Holstein, where they are said to attain (as in some other European lakes) a length of 3 ft. and upwards. In outward aspects they have a strong resemblance to pike, with many characteristics of

The
Pike-
Perch
(*Perca
lucio-
perca*)

perch, their colour being olive-green, banded with brown; and, like perch, they possess two dorsal fins, the first one having shark spines. Living examples have been on view at the Brighton Aquarium; and, in 1878, pike-perch were successfully acclimatised in this country by his Grace the Duke of Bedford, in his lakes at Woburn Park, Bedfordshire, where, no doubt, they were a desirable addition to the local fauna: but in waters like the Thames or Trent, Avon or Tay, and many others, they would undoubtedly prove very dangerous intruders to the young salmon and trout. Pike-perch are excellent sporting fish, and, to judge from their teeth, voracious as pike. They are also considered good food-fish in most of the continental cities, including Berlin, Leipzig, Hamburg, &c. An allied species, the *L. Americana*, found in North American fresh waters, is now artificially hatched in the United States in large numbers; the earliest experiments to propagate them having been made there by Müller and Browne in 1857. In 1880 the late Mr. Frank Buckland had a *perca-zander*, weighing 8 lbs., sent him from Billingsgate Market, which had been imported with several more from Russia. Buckland says, in his *Natural History of British Fishes*, "The pike-perch has a formidable back-fin, which consists of fourteen rays, the longest of which is nearly three inches." (*Qy.*, of the 9 lbs. specimen?) "The point of each ray is sharp as a needle, and the membrane which covers each spine seems to make a retractible sheath for the point. The teeth are, indeed, most formidable. At the tip of the upper and of the lower jaw there are two teeth, conical and exceedingly sharp. Those in the lower jaw fit into

cavities in the upper jaw. Both sides of the upper and lower jaw are armed with trenchant teeth; the roof of the mouth is also armed with two rows of teeth, the two anterior being much the longest. I have in my collection many specimens of fishes' teeth, but none, I think, so terrible as those of the pike-perch. The teeth of an animal indicate the food on which it subsists: I should say, therefore, that the pike-perch is a most voracious and carnivorous fish; but still, I think he must have different habits from the pike, as his teeth are differently arranged. On dissecting the fish, I found that the stomach was thin, but very capacious; in it were the remains of a fish which appeared to be very like that of another pike-perch. When examining the stomach, the œsophagus felt very rough; I therefore dried the soft parts, and found that the pike-perch had a pavement of teeth on each side of the gullet, as well as a set to correspond on the floor of the pharynx. The edges of the bones which carry the gills are also covered with tufts, which tufts are composed of very minute, needle-pointed spikes of bone; these, when dried, are exceedingly pretty. The subject dissected was a female, full of roe; the eggs are very minute, smaller than perch ova."

In many Schleswig lakes zander are plentiful; in others they are not so, although connected with one another, and apparently of the same kind of water. The fish do not like a muddy bottom, but thrive best in lakes with stony, sandy, or clay beds, and in instances where they have been transferred to neighbouring waters, they have been known to take advantage of the first high floods to return to their original home. Considerable difficulty was

experienced in getting the consignment of pike-perch from Schleswig safely to this country ; for, after they were netted and placed in the fish-carriers, which were oval-shaped barrels, 4 feet long, 3 feet wide, and 18 inches deep, the fish (twelve males and twelve females) had a rough journey over frozen roads to the railway at Altona ; and in transit from Hamburgh to London by steamer, owing to fogs and stiff head winds, the voyage lasted sixty instead of forty-eight hours ; air having to be pumped into the carriers every half hour to aerate the fish. The steamship arrived in London at noon on a Sunday, when the consignment of zander was met and taken charge of by people appointed by his Grace the Duke of Bedford. Fresh water was supplied to the fish, and they were conveyed to Woburn Abbey, by railway, rather more than a two and a half hours' journey. On reaching their destination twenty-three of the fish were found to be lively and in good condition ; the twenty-fourth, being doubtful, was killed, cooked, and eaten.

The bass (*Labrax lupus*) also belongs to the *Percidæ*, and is the representative of the genus among British sea-fishes. It is known
The Bass
(Labrax lupus) sometimes as the sea-perch, and is found chiefly on the southern and south-east coasts of Britain, but decreasing northwards. In Ireland and the Isle of Man they are known, but not abundant, and on the Scottish coast are but rarely captured. They ascend rivers to a considerable distance, sometimes far above tidal influence, and, when caught under such circumstances, have in some instances been mistaken for fresh-water perch

(*P. fluviatilis*). Strong, bold and voracious, the bass affords excellent play to the angler ; but being well skilled in artful devices, the fish often eludes efforts to capture it. They are caught on handlines baited with lug-worms, sand-eels, pieces of cuttlefish (squid) ; also by trolling or spinning with sand-launce, and artificial indiarubber baits in the shape of twisted worms mounted on hooks, frequently with salmon-flies and rod, giving then most exciting sport, as fish of 8 lbs. and 10 lbs. are not by any means uncommon captures.

My own largest (13½ lbs.) I caught spinning off Brixham, Devon. Pennant records one of 15 lbs., Buckland one of 22 lbs. from Herne Bay, and Yarrel one of 28 lbs.

The bass is a handsome fish ; the body is elongated and perch-like, grey along the back, and the sides silvery as a salmon's, and white on the belly. There are two dorsal fins ; the front fin has nine sharp spines ; the second dorsal, tail and anal fins are stained grey ; the ventral and pectoral yellowish-white. The scales are of moderate size. Teeth are borne upon the jaws, vomer, palate and tongue, and the gill-cover terminates in two spines. Allied species occur in American waters, and also in the Mediterranean Sea.

Some years ago, in December, 1878, Mr. Begg, a Scotch gentleman who resided near Toronto, Canada, brought to England some living specimens of black bass, the *Grystes nigricans* of the River St. Lawrence, but caught in Lake Rosseau. Most of the fish were sent to Mr. Mason, of Eynsham Hall, near Oxford, and a number of them were taken

The
Black
Bass
(*Grystes*)
nigricans)

by Mr. Begg himself to Dunrobin Castle, the seat of his Grace the Duke of Sutherland.

It was, however, to the late Marquis of Exeter, Burleigh House, Stamford, that English fish-culturists owe the importation to, and acclimatisation of, black bass in this country. Since then (1878 to 1879) other gentlemen have successfully carried on experiments in cultivating these fish, which now rank among our best, for their sport-giving and superior edible qualifications. Small importations of a few hundred bass, brought over by the Marquis of Exeter's pisciculturist, Mr. Silk (who went twice to America for the bass), were placed in the White Water Lake, Burleigh Park, where they bred and multiplied into many thousands, some of the fish now being specimens of from 6 lbs. to 8 lbs. each.

Mr. Silk's report of the experiences gleaned in his expeditions undertaken to obtain the bass, and the trouble taken in conveying them alive to England, are so interesting that I am induced to give a summarised account of them:—"All of the black bass that I brought in 1878 from the United States of America were taken from the Delaware River. I placed them in boxes floating in the stream ready to be taken away. On the day preceding the sailing of the steamship for England, they were placed in the tank I had prepared for them by the riverside. We got them to the train without any loss, and on arriving in New York had them placed on the main-deck of the steamer; it was then 11 p.m., we having left the Delaware River at 3 p.m. Up to this time I had no loss; my greatest trouble was the high temperature, viz., 78 degrees all night. I kept the water as cool as

possible with ice. I stayed by the tanks all night, pumping in air every few minutes, and keeping people from meddling with them. When daylight came I examined the tanks and found five fish dead, which I removed at once. It was now 5 a.m., and the ship was to sail at 6 a.m. I got some men to assist me in changing the water in the tanks. I had one spare tank, which I filled first, and then reduced the temperature from 75 degs. as it came out of the hydrant to 58 degs., then placed the bass in it, and so on, until I had given them all fresh water. We sailed at 6 a.m. sharp. When we got out to sea a few miles, I made arrangements with two of the steerage passengers to assist me on the voyage. It was then 9 a.m., and I gave them instructions what to do. After this I arranged with my men to keep watch two hours each, and to relieve each other at meal times. I always took four hours' watch in the night. I then roused one of the men, and gave over the fish in good order. If there were any dead I always took them out at once. I made it a point never to go to my cabin at night. We got on very well the first day, as it was cooler; but after this we got into the Gulf Stream. The air and sea were both very hot, the atmosphere 85 degs., and the sea 78 degs. It was during these five days that we lost most fish. We cleared the water every day by straining it through flannel; all the thick and dirty water we threw away, and added fresh water by melting ice. The sixth day out we got into cooler weather, and the fish commenced to do better, as the temperature of the atmosphere dropped to 57 degs. We used very little ice, unless to make fresh water with. We kept on

like this until we reached Liverpool, after ten days' passage.

"I now got fresh water, and changed all in the tanks. The fish did not object in the least, but were quite lively. It did not hurt them changing the water from American to British. I got them conveyed to the railway station and placed on a truck. We arrived at Stamford in due course; and on counting the fish, I found we had 153. I left the Delaware River with 250, so that I had lost 97 fish in twelve days.

"In 1879 I went again, and started from America with 1,200 black bass, and on arriving home had 812, having done better than on the previous occasion. All of the black bass were for the Marquis of Exeter, he having borne all the expenses of the experiments.

"Most of the fish were placed in a lake belonging to his lordship, called 'White Water,' near Stamford. They would be about half a pound each in weight, so that they had done very well. The first lot that were put in will be three years old in April, when they are expected to commence breeding."¹

It has been stated that the black bass of the North American Continent is a fish esteemed by American anglers even above the trout.

Professor Browne Goode, the American Commissioner to the International Fisheries' Exhibition, 1883, stated that "as an 'angler's fish,' he believed the black bass to be superior to any fish in Great Britain outside the salmon family, and that its introduction into rivers where pike, perch, roach and bream are the principal occupants, could do no

¹ Buckland's *Natural History of British Fishes*.

possible harm, and would probably be a benefit to anglers ;" he said also, "it is well suited for large ponds and small lakes, where there is an abundant supply of coarse fish, which a school of black bass would soon convert into fish flesh by no means coarse." The late Marquis of Exeter when writing to Frank Buckland in 1874, said, "I could have some black bass sent over, but am afraid of them, as Mr. Roosevelt says that the black bass (*Grystes nigricans*) is 'a fighting American, and will swallow every British fish in your lakes. It is our champion fish, and it can whip all creation of the fish race.' After this description I think that you will advise me to have nothing to do with such a devil, if I want to get up a stock of trout in my ponds." Since 1879 Mr. Silk made several successful excursions to America, bringing back with him for the Marquis and his friends, considerable numbers of the small and large-mouthed black bass ; and the several importations were distributed amongst various lakes and ponds in England, including Sandringham, Rushden, White Water, the rivers Welland and Nene ; and in Scotland the Duke of Argyll turned a considerable quantity into one of his lakes in Mull.

The black bass spawns in May or June ; is a very game fish, and its recommendation to anglers will be the fact that it rises freely to the fly, and will take minnows, worms and baits of almost every kind, and, when hooked, gives grand sport, "fighting to the last." Black bass attain the weight of 10 or 12 lbs. where water and food are suitable, and conducive to large growth ; they are excellent food for the table, having white, firm flesh, with curd between the flakes, and taste more like whiting

than fresh-water fish, and they are very free from bones. But, with all these qualities and recommendations, it would not be wise to favour the indiscriminate introduction of the fish into British waters ; though they might be confined to some of the ponds and lakes which now afford but little sport to anglers.

[**Characteristics of Black Bass.**] A head of moderate size, rather flat between the orbits. The angle of mouth is in front of posterior border of eye. The front dorsal fin has six or seven very sharp spines, the middle one of which is rather the longest ; the second dorsal has thirteen or fourteen soft rays ; the pectoral fins sixteen soft rays ; the anal eleven or twelve soft, and one or two sharp, spines ; the tail, seventeen soft rays. In mature fish the colour on the back is somewhat of a dark olive-green, toning off to lighter bronze-green at the sides, and softening to yellowish-white on the belly. The younger fish are more or less spotted or marked with blotches in a regular line from shoulder to tail, which markings gradually disappear as the fish grows older, but spots remain upon the scales.

The large-mouthed (*Micropterus salmonides*) and the small-mouthed (*Micropterus dolomieu*) are both natives of most of the rivers and lakes in Canada and the United States. *M. salmonides* may be easily distinguished by its enormous mouth and projecting under-jaws from the smaller variety, which is also, as a rule, rather darker in its colourings.

As their custom of making a nest and mode of spawning is peculiar, and the solicitude they display about their young is interesting, I give a con-

densed account of the process, as furnished by the Marquis of Exeter in a letter to the Secretary of the National Fish Culture Association, of the executive of which I was a member during its too short existence.

"The female bass deposits her ova at the bottom of the nest, which she has prepared by scooping out a hole in the gravel or mud in the bed of the lake or river. These nests are nearly circular in form, varying, according to the size of the fish, from 1 to 2 or 3 feet in diameter. The female lies on her side, and the male fish with his mouth presses out the ova by a series of what look like bites along her belly. The male then ejects the milt over the eggs from time to time, and the spawning process lasts for two or three days. The parent fish take the greatest care of the ova and of their young when hatched, by swimming round the nests and keeping off all intruders or anything which is likely to injure the young brood. When the young black bass are able to swim, one of the parent fish accompanies them. I have seen, on a hot, still day at White Water, the old bass swimming leisurely about near the surface of the water, surrounded by her family of young bass, leading them in the same way that an old hen on land goes about with her chickens."

According to the late Mr. Frank Buckland, the Murray River or Macquarie Cod (*Oligorus Macquariensis*) is an Australian member of the *Percidæ* family. It is one of the largest, if not absolutely the largest, of fresh-water fishes, and sometimes is captured from 80 lbs. to over 100 lbs. weight. When

The
Murray
Cod
(*Oligorus
Macquar-
iensis*)

from 3 lbs. to 10 lbs. it is considered most marketable, is without doubt a delicious fish, and said to eat better than a grey mullet. It abounds in most of the rivers north of Sydney, and in those of the western watershed, such as the Murray and Macquarie and their numerous tributaries, affording good sport for anglers and a valuable supply of excellent food; they are usually caught for market with a trammel or bag-net set across the stream, or by hook and line. They have been introduced into several of the inland lakes near Sydney, such as Lake George, Lake Bathurst, &c., where they thrive remarkably well, becoming immense fish, and exceeding fat. A large specimen was exhibited at the Great International Fisheries, 1883. Large quantities are daily, during the cold weather, sent to the Melbourne and Adelaide markets from the Murray and its tributaries; the supply for the Sydney markets is obtained from Lake George and from the Macquarie river, but chiefly from the Murrumbidgee, being forwarded by train from Wagga Wagga.

The following is an abstract from Mr. Wilson's *Character of the Murray Cod*:—"He is idle, he moves but slowly, and in consequence he cannot do injury to the small fish, which are generally so alert. He is solitary in his habits, he swims up little currents of water, and easily accommodates himself in a water-hole; a water-hole being a large hole in the bed of the river, always full of water, frequently found in the rivers of Victoria when the great heat of the sun has dried up their course."

The other Australian *Percidæ* are the two species of golden perch (*Ctenolates ambiguus*), found in the Victorian fresh waters, and at Wagga Wagga, on

the river Murrumbidgee, and *C. flavescens*, caught in the upper waters of the river Macquarie. There is another variety, viz., the silver perch (*Therapon Richardsoni*), which, although taken in considerable numbers for the markets with the net, affords good sport to the angler ; for from twenty to forty fine fish, weighing from $\frac{1}{2}$ lb. to 6 lbs., may easily be secured by one person in a day's fishing, within a few miles of the town of Wellington ; but, as the Murray River is tidal above Wellington, the Australian silver perch is possibly a *Labrax lupus*, or basse.

The following extract from a letter written by my son in 1893 may possess some interest for anglers :—

“ Heat 107° in the shade, and not a breath of air stirring. This day will long be remembered in the Liverpool Plains district. Horses, cattle, and sheep have been killed in hundreds by sunstroke, and birds found dead in thousands, the excessive heat (more than 150° in the sun) having proved too much for them.

“ I left Mellaby on the evening of the 24th. January, about 7 P.M., at sundown, as it was nearly impossible to move in the daytime. It was a moonlight night, and I arrived at Gunnedah, near Tamworth, at 7 A.M. on the 25th, covering a distance of nearly thirty miles. The walk did me no good, and soon as I saw the Peel, or Namoi, river, I felt very much relieved. I camped five days at Gunnedah, and caught a tremendous lot of fish—in fact, almost subsisted on damper and cod. Father's 37 lb. and 36 lb. pike are infants compared with the Murray cod I brought to bank. I baited with $\frac{1}{2}$ lb. lump of raw mutton, placed on a large

strong hook ; my line was thick whipcord, with a stone for the sinker. One cod in particular weighed between 80 lbs. and 90 lbs., and took another cod of more than 3 lbs., which I had baited with. I also caught a splendid specimen of the golden perch in the Peel river."

CHAPTER XI.

LATE AUTUMN PIKE AND PERCH FISHING.

ONE of the most beautiful landscapes—than which perhaps there are few lovelier within forty miles of London—is to be enjoyed from the park at Bramshill, Hampshire, where, from altitudes clothed with pines, oaks, elms, and yews, the spectator can look out far and wide, over an expanse of valleys, to the heights of Chobham Ridges and the Fox Hills, with the Hog's Back beyond Guildford in the far distance. The lowlands are fertilised by the waters of the river Loddon, which rises near Basingstoke, and its affluents, some of them being overflows from large lakes, among which are those of Bramshill, Tundry, and Dogmersfield ; the last-named, I think, supplies water to the Basingstoke Canal.

At Odiham, close by, is a stream, holding large trout ; but it is difficult to obtain permission to fish. The lakes contain pike and perch, carp, tench, &c. ; while in most of the streams chub are plentiful ; but it is of pike and perch that I write. In this beautiful country, on the confines of Bramshill Park, lived and died the Rev. Charles Kingsley, Rector of

Eversley, poet, novelist, and an ardent angler. The stream flowing through the valley below the park turns and twists about among coppices of nuts and hazels ; at every bend is a larger tree or bush, their roots pushing through the bank, and forming holts for perch and chub. At all these corners the water is from four to five feet deep—fine places for paternoster fishing, with a worm or minnow. For a mile or two the stream maintains this character, until we approach a brick and timber bridge, hoary with age, covered with lichens and moss-embroidered ; wild clematis and honeysuckles overrun the banks and dip into the water flowing beneath.

In the meadows immediately beyond the bridge, the stream widens out into lagoons, where (when the early morning frosts of autumn have destroyed the weeds) is rare spinning for pike. It was here, some years ago, that Francis Francis, another friend, and myself, had splendid sport.

The meadows beyond the bridge are boggy along the margin of the stream, and the angler sinks in over his ankles, so that water-tight knee-boots are necessary ; but when frosts have hardened the ground, the water can be comfortably approached and fished. Handsome wrought-iron gates, three centuries old, extend between the entrance lodges ; the drive, through an avenue of noble elms, crosses the stream over a stone bridge of five arches, and ascends to the summit of the park by a winding road, which skirts one side of the lake, to the mansion—a grand Elizabethan structure, built on a terrace, reminding one somewhat of Hardwick Hall, in Derbyshire. It is said to contain as many windows as there are days in

the year. It was here that the poor girl playing hide and seek one Christmas Eve got lost and smothered in the old oak muniment chest, this incident forming the theme of the old song, "The Mistletoe Bough."

The ground at the rear of this fine old mansion drops by a succession of very wide terraces cut into the side of the hill ; on each are the remains of what were evidently fish-ponds, ruinous now, dismantled, and nearly dry, with large trees and tall bushes growing, where fish were once "in stew," providing food or sport for the inmates of and visitors to the mansion.

The park, of large extent, is very beautiful, because of its exceeding wildness. It seems to have remained uncultured for a century. The undergrowth has in many places overrun wide gravel drives ; ferns usurp the trim parterres of former days, and grow profuse on the once well-trimmed lawns ; laurels and rhododendrons flourish luxuriantly, attaining huge dimensions ; and they again are overgrown with brambles, woodbine and honeysuckles, in dense tangles and thickets, forming safe retreats for the rabbits, which on fine evenings dot the lawns all round about.

Among the lofty fir-trees and giant oaks and elms, wood pigeons nest and breed ; while cock pheasants and their hens strut about in undisturbed security, save when a fox now and then levies toll ; for there are fox-earths about the neighbourhood, as any one would expect in so wild a jungle ; stoats and weasels are not unknown, but on the contrary are frequently seen, as they run and twist in and out the thick undergrowths. The badger also is occasionally met with by wayfarers

after nightfall, this animal's natural timidity keeping him indoors in his burrow during the daytime. The large lake is nearly square, and belted on two sides with noble timber, an island in the centre of it being similarly wooded.

At the side farthest from the boat-house, sedges and water-lilies form harbours and breeding places for the pike and perch. A mighty fish had his home there—a fact imparted to me by the keeper. Accordingly I arranged to have a day's fishing to try and capture it, and invited the late Mr. Francis Francis—cheerfullest of companions—to accompany me. My other friend lived in the neighbourhood, and I had the pleasure of his presence, as also on subsequent occasions when angling there; but, as he was fonder of shooting than the sister-sport, and there were plenty of wild-duck, which were bred there, also coots and moor-hens, he usually brought his gun with him.

Francis and I, on arriving at the station, found my friend's waggonette awaiting us. On our drive to his house we placed our livebait cans and their contents in a brook which flowed through the keeper's garden, and found our dace alive and in splendid order when we called for them next morning to take them to the lake, a mile distant. The boat-house reached, we lost no time in putting rods and tackle together and getting afloat in a punt, well appointed with every requisite in the shape of oars, poles, hitchers, &c.; on its stern was painted in gold letters, "Rev. Charles Kingsley," the punt he had built on the Thames and conveyed there for his own private use. Francis and I rowed to the top corner of the lake, putting my friend (our companion and host)

ashore on the island, for some ducks had pitched in the water the other side of it. By creeping carefully through the undergrowth, he got a shot and killed a mallard, which we punted after and secured, then left him for awhile to pay attention to the wood-pigeons, which every now and again settled in the trees there.

Fishing just outside the fringe of sedges in water eight feet deep, Francis soon got a run, and was playing a nice fish, which took some thirty yards of line with a rush, making for a penstock, where some dangerous posts stuck up in the water; however, the pike was soon well in hand, gaffed, and in the punt; it weighed 9 lbs. He was fishing with snap-tackle, I was paternostering, searching the water round about us with a small, lively dace, both of us every now and then adding a fish of retainable size to those already caught.

Thus the morning wore on until it was time for lunch, when we re-embarked our friend at the island, and thoroughly enjoyed our midday meal, which we had thoroughly earned; then we tried water not yet disturbed, quietly approaching a reedy bay—the home of the big pike—not going too near, but fishing it from a distance of 20 yds. Some moorhens swimming in the bay took flight in alarm, for there was a great swirl in the water, and one of the birds disappeared, which showed us where the pike was; and as the bird did not appear again, we judged the fish was on the feed, so I cast a good-sized dace on snap-tackle to where the pike bulged, and in less than two minutes it had taken my bait, and I had driven home the steel. Francis rowed the punt away from the sedges to open water, where, after a

tearing struggle of a quarter of an hour, my fish was gaffed and knocked on the head, a handsome pike of 18 lbs., thick-set and fat, and rotund as a jolly well-fed monk of the olden time.

The lake, being on the higher portion of the park, has no streams running into it bringing in fish-food, but is kept full by springs which seem never to fail; in fact, there is an overflow at the penstock, the water discharging into the river in the valley. Carp abound in the lake, and on the smaller ones the pond roach and white bream (*Abramis blicca*); pike grow large and lusty, finding plenteous food; while the young of the wild-ducks and coots, which nest and breed on the island and in the sedges, pay constant tribute to the water-wolves.

So we finished a day of sport with true contentment, as all anglers should; and as our friend drove us towards his hospitable home we resolved to fish next day the waters in the valley. The morning broke clear and rather frosty, with wind enough to ruffle the water, and make an angler happy with anticipations of sport. By nine o'clock we were driving across Bramshill Common, through an expanse of brown moor and heather, stretching away for many a mile towards Windsor Forest. Below us in the valley flowed the two streams, Blackwater and Whitewater, both adding volume to the Loddon. Strathfieldsaye Park (the Duke of Wellington's) was within three miles; its waters, once celebrated for enormous pike and perch, were drained some years ago, and afterwards made into a trout preserve. Turning along a cart-track, down a deep slope, where the ruts in the loose gravel and peat-mould nearly brought the

horse and us to grief, at last arriving at the stream ; in the meadow opposite the keeper's cottage we fitted up our rods, and mounting gut-paternoster with two hooks, we fished with a well-scoured worm nearest the plummet, and a minnow or small gudgeon on the top hook. Keeping a couple of yards from the bank, we dropped our baits over the rush-fringed margins into all the deep water at the bends of the stream, and caught many fair-sized perch and chub, among the latter a few from $2\frac{1}{2}$ lbs. to 3 lbs., also half a dozen jack, one a seven-pounder.

And so, fishing on through nut and hazel coppices, we at length reached the old brick bridge, with its wooden rails overgrown with wild clematis and honeysuckle. Here we took off our paternoster tackle, for the water widened out into a shallow lake ; and as the breeze blowing down the valley made a fine ripple on this lagoon, we mounted pike spinning-gear, with 5-inch dace for lures.

Looking up to the hilly park above, an angler, moved by the beauties of Nature—and where is there a *true* disciple of Izaak Walton who is not ?—would be enraptured by the sight of hundreds of splendid fir trees crowning the heights ; grand gnarled giants, planted there by James the First, or at least in his reign.

We were now at the little lake, and Francis was ready to make a cast across the channel to just below where the stream flowed in. His bait flew straight towards and close up to the sedgy margin, dropped in without a splash, began to spin athwart the water, when a bulgy wave unmistakably showed a good fish had sprung at the lure ; Francis spun his bait no faster : he was always cool

when fishing. A second more his line tightened, and he had struck a fine fish, which fought hard to gain his stronghold, where no doubt many previous anglers had come to grief through broken tackle.

The fish was brilliantly played, past and under boughs overhanging the stream, by dipping the rod-point down to the water ; and I had the satisfaction of gaffing a fifteen-pounder for my old friend, one of the prettiest pike of its size I had ever seen. Then came my opportunity. I tried the water round about, spinning over every portion of it slowly and carefully ; and about twenty yards below rose a fish, hooked and played it, bringing to grass in about ten minutes a nice pike of 12 lbs. This was encouraging ; and fish fed so well that by the time we reached the stone bridge at one o'clock, where our friend and the keeper were waiting us, with a basket containing a cold loin of roast pork and other toothsome fare from my friend's farm, also a large stone jar of brown October ale, we were able to show them a baker's dozen of pike, besides the perch and chub.

Beyond the stone bridge the stream again widens, deeper water flowing through the centre arch along a channel down the middle of the lagoon to the weir. Much of this can be fished by floating a livebait down from the bridge ; and all the water covered with a spinning-bait from either bank. We adopted both methods, and captured some more sizeable jack, the largest not exceeding 8 lbs. weight. There were shoals of young carp and roach swimming in this water ; but dace were deadly bait,—no doubt the pike appreciated a change of diet.

Snipe abound here—the boggy meadows of the valley just suit them, afford plenty of food, and the

tufts of rushes nesting-places. High overhead in the breeding season snipe can be seen rising and falling on vibrating pinions through the air, making their peculiar bleating all the day long, while the hen birds are on their nests.

Woodcock frequent the quiet glades of the park, and in April are sometimes plentiful; the large hollies with straggling branches drooping over the withered brackens provide splendid shelters, while the woodcock's mottled plumage of grays and browns assimilates so nicely with the dead leaves in which they cower, that a passer-by may almost touch them before they will take flight.

As we were resting by the bridge, enjoying the fragrant weed, the startled cry of a blackbird drew our attention to some thickets beneath the firs bordering a woodland path. Ascending the hill, a dog-fox showed himself for a minute, and perceiving us, slyly glided back to shelter, and out of our sight. He was no doubt intent on catching a rabbit for his evening meal; and as daylight was now fast fading, we tipped the keeper, got into the waggonette with our fish and tackle, and drove away to our friend's farmhouse. Its surrounding walls were part of what had been a monastery, suppressed during the reign of Henry VIII. The granary had been the chapel—this was evident from the eastern widow, which yet remained with its stone traceries—also the gables, and a small belfry; but the bell which once summoned the holy men to prayer had long since disappeared. Outside these walls was an orchard, full of crabbed and gnarled fruit trees, hoary with age; beyond this was a stream and a dilapidated fish-pond or stew.

The once rapid stream is now arrested by a weir,

for the purpose of obtaining a head of water for irrigating the meadows ; and in the small pool below the weir a few fine trout can usually be seen. Here ten or a dozen years ago a large one of 5 lbs. was caught with a fly ; and a brace a fifth that size can often be taken on a favourable evening.

On reaching the farmhouse we found our host had invited three neighbours to meet us and spend the evening. Two of them were farmers living a mile or so away ; the other, a cattle-dealer and meat-contractor for Aldershot camp, which is distant some six or eight miles ; they were jolly fellows and good all-round sportsmen. Francis Francis was exactly in his element ; and with much chat about angling, shooting and coursing, we passed some very pleasant hours, until the near approach of midnight broke up our merry party. The next day we had a delightful ride through grassy lanes ; the hedgerows on either side were planted with oaks and elms ; the foliage was beautiful even then, in its late autumn tints. By nine o'clock we had completed our six miles drive, and arrived at the waters we were to fish—two lakes ; the largest, fifty acres in extent ; the other, about thirty acres, a few fields distant, on a higher level. A small brook, formed by the overflow of the top lake, meandered between the two, finally leaping down two or three pretty cascades into the lowest and more important sheet of water, near to which, on a gently sloping acclivity, stood the mansion, a handsome edifice, erected in the early part of the century. Here again we were impressed with the magnificence of the timber and the grand masses of evergreens of all kinds. The place was beautifully laid out and trimly kept—such a marked

contrast to the wildness of the demesne where we had spent the two previous days, in which the absence of culture was the peculiar charm.

A noble bridge of brick spans the lake, and forms a fitting and elegant approach to the residence. The waters of the upper lake extend some distance along a valley. At the lower and deeper end is a boat-house, and, near to this, the penstock and overflow. All about here the water is from 8 to 12 feet deep, margined with sedges and bulrushes, broken up into little bays—excellent paternostering water, and most of it easily fished from the banks.

The boat we used afterwards, so as to negotiate the central and upper portion of the lake, which was not practicable from the shore, because of trees and tall bushes growing close to and in the water. I began with a small dace on a stout-gut paternoster tackle, and was soon playing a heavy fish, which Francis thought I stood no chance of killing; but, within a quarter-hour of fine sport, I landed a handsome pike that just topped 16 lbs. Then Francis, fishing with live-snap, caught a twelve-pounder; and these two fish, with some others of fair size, although much less in weight, made a pretty show, when one of our friends of the previous evening, and a keeper, came to see what sport we were having, and drink a libation to our continued success.

Most anglers who had the advantage and pleasure of Francis's friendship will remember how that past master of the gentle art hated to be bored and interfered with while he was fishing, especially by any one who knew little or nothing about angling. There is nothing so vexing as to

be worried with advice and suggestions from superficial anglers—I mean those who observe little and note still less when they go a-fishing, and think, for instance, that because chub, roach, or barbel, have once been caught in a certain place, they can always be captured there ; and that, where pike may be caught in December or January, that they will be found in the same locations in the autumn months, which is seldom, if ever, the case.

And so it came to pass that the keeper got severely dropped on, for he stuck close to Francis, who was carefully spinning a likely piece of water, and he kept repeating, "You take my advice, sir, and go to the top of the lake and try there ; a friend of mine, sir, last March, caught a twenty-pounder, sir, on them shallows." At length Francis, who could no longer endure this reiterated advice, turned round to the keeper, and said, "Confound your friend and his 20 lb. pike, and you too. If you don't hold your jaw, I'll chuck you into the water." So the keeper departed, and left us to ourselves. We then got afloat, fished the central part of the lake, and thence back to the deeper water, where the best fish are almost sure to be in the autumn ; and the result justified our choice, for Francis, who was spinning low and deep, struck a heavy fish, which fought so desperately for life and liberty that it was nearly half an hour before we got a glimpse of it, and then, from its dimensions, it was, to all appearance, a fish of 30 lbs.

The boat had drifted, and I was reluctant to put down the anchor, for fear of the pike (which was now being played on a shortened line) getting entangled round the anchor-chain. But we had got so unpleasantly near to a pile standing up in,

but just below, the surface of the water, that, to avoid this danger, Francis kept a tight tether on the fish. He had it almost near enough for me to gaff, when—well, we did not catch that pike, for the flight came away from its mouth, through a hook snapping at the bend. The following year a 28 lbs. pike was caught at the same place by an acquaintance of mine, which I saw, and a very handsome fish it was. It may have been the one we interviewed, and so nearly persuaded to go home with us.

After resting awhile, we proceeded to the lower lake, and rowing to the far side so as to have the wind at our backs, we put out two dace on snaptackles, and while Francis continued to spin, I paternostered. Pike fed fairly well; the livebaits accounted for some good-sized fish, and once my friend and myself were playing pike simultaneously.

The view from the centre of the lake was very lovely. The bridge of many arches, mostly ivy-grown, stretched across the water; and gently rising ground on all sides bounded the vision. To the left the white stone mansion, and beyond, masses of trees on the sloping hill, yet in sufficient foliage to display a charming variety of green—the sombre colour of the firs, and the purple and copper of the beeches. Near a bed of rushes we saw the swirl of a feeding fish within casting distance, over which Francis at once spun his bait, to be as promptly accepted.

I never saw a pike give better sport. Had it been a tyro handling the rod and line it would have been long odds in favour of the fish escaping. But the pike was played to the gaff, duly landed,

and proved to be the best of the three days' catch. It bumped the beam at 19 lbs. The fading light warned us it was time to put up our rods, and pack our fish. The friend who had volunteered to drive us to the railway station was within sight, crossing the bridge ; our holiday was ended, and we left for London, satisfied with our sport, and more than pleased with the hearty welcome we had met with at our friend's farmhouse.

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